

# The Mining Journal

## RAILWAY AND COMMERCIAL GAZETTE.

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 844.—VOL. XXI.]

LONDON, SATURDAY, OCTOBER 25, 1851.

[PRICE 6D.]

### Statistics of Cornwall.—In the Vice-Warden's Court.

TILLY v. MACINTOSH—SAME v. TRUSCOTT—SAME v. DICKINSON—  
SAME v. SMALL—SAME v. TREVILLION.  
IN RE WEST UNITED HILLS MINE.

**NOTICE IS HEREBY GIVEN**, that, pursuant to the several Orders of Decees made in the several above-named cases, and bearing date respectively the 19th day of August last, a PUBLIC AUCTION will be **HOLDEN** at the Red Lion Hotel, TRURO, on Thursday, the 30th day of October inst., at Four o'clock in the afternoon, for **SELLING**, in such lots as shall be then and there determined on—  
**FIFTY** (110th) PARTS, or SHARES, of the defendant, George Mackintosh,  
**TWENTY-FIVE** (110th) PARTS, or SHARES, of the defendant, Nicholas Truscott,  
**TWENTY-FIVE** (110th) PARTS, or SHARES, of the defendant, William Dickinson,  
**FIFTY** (110th) PARTS, or SHARES, of the defendant, William Small,  
**TEN** (110th) PARTS, or SHARES, of the defendant, John Trevillion,  
and in the SAID MINE; and the LIKE PARTS, or SHARES, of the said defendants respectively and in the ORES, HALVS, MACHINERY, and MATERIALS, and OTHER EFFECTS, upon and belonging to the SAID MINE.  
For further information application may be made to Messrs. Hodge and Hockin, solicitors, Truro.—Dated Registrar's Office, Truro, October 16, 1851.

**MINING PROPERTY**, situated in the parish of LLANDILOES, in the county of MONTGOMERY, NORTH WALES.

**TO BE SOLD, BY AUCTION**, on Tuesday, the 4th of Nov., the MACHINERY, MATERIALS, FURNITURE, and EFFECTS of the MONTGOMERY LEAD AND COPPER MINE,

(formerly Nantmoolyn).  
COMPRISING  
1 46-ft. wheel  
2 balance bobs  
1 main ditto  
220 fms. flat iron rods  
1 20-ft. wheel and crushing mill  
10 fms. 9-in. pumps  
10 fms. 8-in. ditto  
1 working barrel  
1 capstan and shears  
and a large quantity of materials, smiths' tools, &c., &c.  
Application to view the mine, &c., to be made to Capt. Michael Barbary, Plympton, Rhayader, South Wales.  
For further information and particulars, communications to be addressed to Mr. J. N. Edwards, the Secretary, at the offices, 9, St. Michael's-alley, Cornhill, London.  
October 17, 1851.

**TO ENGINEERS, FOUNDERS, STEAM-SHIP BUILDERS, AND OTHERS.**

**TO BE SOLD, BY PRIVATE CONTRACT**, on very advantageous terms to a purchaser, the proprietor retiring from the business, the **NORTHLEET IRON-WORKS**,

situate on the banks of the Thames, about 20 miles from London-bridge, and within a few minutes walk of the Northfleet Station of the North Kent Railway, by means of which the City may be reached in one hour, constantly throughout the day.  
The BUILDINGS have been most substantially erected, principally within the last three years, and are planned with much judgment.

A PIER has been also BUILT, extending into the River, and a WHARF constructed, FORMING A DOCK, in which vessels of considerable tonnage may lie, affording facility for fitting or repairing marine engines or boilers, or for loading or unloading goods, for which purpose a PAIR of SHEAR LEGS has been erected, capable of lifting 25 tons; also a 10-ton WHARF CRANE.

The buildings comprise a TURNERY, fitted with self-acting screw-cutting, turning, boring and surfacing lathes, drilling machines, shaping and screw-cutting machines, planing machines, and steam arm, punching and shearing machine, principally by Whitworth, Collier and Smith, Beacock and Tannett; high-pressure STEAM-ENGINE, and in an adjoining building two steam-boilers.

A lofty ERECTING SHOP, with a 20-ton overhead travelling CRANE, boiler-makers and smiths' shops, with forges, furnaces, set of bending rolls and plates, cranes, and all requisite tools.

A commodious FOUNDRY, with four cupolas, patent fan, high-pressure STEAM-ENGINE and BOILER, a powerful crane, drying stove, and all usual appendages, pattern-makers' shop, copper-smiths' shop, draughtsman's office, counting-house, coach-house, stabling, loam shed, iron stores, and store-rooms.

A spacious YARD, with triangles and crab, with gateway entrance. The whole establishment occupying a site of about one acre.

The premises are held for a long term, at a nominal ground-rent.  
The machinery and tools are nearly new, and by the best makers. The supply of water is unlimited; coals can be procured at 9s. per ton, and the general arrangements and substantial character of the buildings combine to render this establishment most desirable to any person who may wish to commence business as an engineer, or to join the branch of marine engine manufacture to a business already established.

Further particulars may be obtained on application to Messrs. Fuller & Horsey, No. 13, Billiter-street, London.

### GLAMORGANSHIRE—SALE POSTPONED.

**THE SALE OF FREEHOLD ESTATES AND MINERALS**, comprising the Farms of Maesmellin, Pant-y-Shanel, Pentwin, a Moiety of Noyad Wen and Tyr Elnos, with the Cottages and Woodland thereon respectively, and the Mines and Minerals under a part of the Glamorganshire Estate, advertised to take place at the Castle Hotel, Neath, on the 29th October inst., is POSTPONED until further notice.  
May be privately treated for in the mean time, on application to Mr. T. Thomas, auctioneer, &c., West of England Insurance Office, Neath.—Neath, Oct. 20, 1851.

**TO MINE PROPRIETORS.—TO BE SOLD, at TOMAN-TOUL, BANFFSHIRE**, a very superior CRUSHING MILL; the water-wheel is entirely of cast-iron, 24-feet diameter, 4-feet breast, and overshot. The spur wheel is 7 feet diameter, and with the axle, pin, &c., very strong, and capable of driving any additional machinery the water-wheel can propel. The crushing cylinders are 24 feet long, the upper pair 2 feet diameter, and the lower 20 inches. The framing is strong, and of the best rock elm. Compound levers are attached to each pair of cylinders, affording any power that may be required at will. The machinery is of the best quality as to materials, strength, and workmanship; and, being under cover, is as good as when put up, having never required any repairs. The machinery may be shipped at Kingstonport, Garmouth, or Port Gordon, on the Moray Frith, to which there are good roads. Applications for purchase may be made to James Burgess, mining engineer, 49, Cumberland-row, Newcastle-on-Tyne.

**HENDREDFORGAN COLLIERY, GLAMORGANSHIRE.**  
—TO BE LET, for a term of years, all the valuable and well-known SEAMS of ANTHRACITE COAL, IRONSTONE, and BLACKBAND, under the HENDREDFORGAN FARM, in the parish of LLANGUICKE, in the county of GLAMORGAN, which comprises ONE HUNDRED ACRES of LAND, and is situated within two miles of the Swansea Canal, to which there is communication by railroad, and within twelve miles of the port of Swansea.

The property contains the Little Vein, 3 feet thick, celebrated for the manufacturing of anthracite iron; the Big Vein, 5 feet thick; the Welford Vein, 3 feet thick; and the Three Coal Vein, 3 feet thick—all of which have been proved; and also all the SEAMS or BANDS of IRONSTONE, BLACKBAND (7 inches thick), on the north crop of the basin, some of which have been lately worked by the proprietor, and are now in a state for immediate operation. The coal is well-known in the London and other markets as Cox's Stone Coal.

Further particulars to be had of Mr. M. G. Steward, mining engineer, Bedminster, Bristol; of the proprietor, Mr. Evan Jones, on the property; or at the office of Mr. Alex. Culbertson, solicitor, Neath.

**TO IRONMASTERS, RAILWAY DIRECTORS, ENGINEERS, AND FOUNDERS.**—The SUBSCRIBER having been appointed SOLE AGENT in LONDON for the SALE of MR. MORRIE'S PATENT IRON, begs to intimate that he is prepared to SUPPLY Railway Companies, Engineers, and Founders, with the PATENT MALLEABLE and TOUGHENED CAST-IRON, and that all orders addressed to him for these, and also for RAILS, with Hardened Surfaces, shall have his prompt attention.

Specimens of the different Irons shown, and every information afforded, on application. Information as to the terms of License under Mr. Stirling's Patents will be given by the Subcriber, and also by Mr. JEE, C.E., 6, John-street, Adelphi. A. MACNAUGHT.  
OFFICES.—2, Queen-street-place, Upper Thames-street.  
WAREHOUSES.—Paul's Wharf, 25, Upper Thames-street.

**SEWERAGE OF LONDON.—THE ATTENTION OF THE COMMISSIONERS** appointed to determine upon the MOST EFFICIENT MATERIAL for the CONSTRUCTION of the SEWERS OF LONDON, is particularly directed to the ASPHALTE OF SEYSSSEL, which more than any other material is applicable to the CONSTRUCTING and INTERNAL COATING OF BRICK CULVERTS and OTHER CHANNELS for DRAINAGE.

The experiments made by the Royal Artillery on the embankments of Plymouth Citadel, constructed of Seyssel Asphaltic Brickwork, under the orders of the Hon. Board of Ordnance, have fully proved the superiority, adhesiveness, and strength of Seyssel Asphaltic over all other compositions. A printed account of these experiments can be had on application to—  
I. FARRELL, Secretary, Seyssel Asphaltic Company.—Claridge's Patent.—Established 1838.

Note.—The application of the Asphalt of Seyssel is especially recommended by the Commissioners on the Fine Arts for covering the ground line of brickwork in marshy situations, and it has been suggested that it would be peculiarly applicable for covering the areas enclosed by green yards, and for the construction of catwalks.

### MR. JAMES CROFTS, of 4, KING-STREET, CHEAPSIDE, MINING BROKER, OFFERS his best SERVICES to CAPITALISTS for the PURCHASE or SALE of MINING SHARES, and transacts business only for principals.

Mr. Crofts has FOR SALE SHARES in the following MINES:—West Polgoth, Wheal Providence, Allt-y-Crib, Cockley Beck, Wheal Brewery, Trevaun, Silver Valley, Wheal Golden, Bronfloyd, Wheal Zion, Okel Tor, South Tamar, East Tamar, Bodmin Consols, Warleggan, North Fowey Consols, Calstock Consols, &c., and can PROCURE or SELL SHARES in all DIVIDEND MINES.

Mr. Crofts is a BUYER of LAMHEROEE WHEAL MARIA.

The increased capital thrown into the market by the payment of the last quarter's dividends and Government Stocks, having produced a considerable movement in mining shares, early purchases, in order to avail of moderate prices, are recommended. Mr. Crofts will (confidentially) give an opinion of the value of any mine within his knowledge, either personally or by letter.—Dated Oct. 25, 1851.

### MR. EVAN HOPKINS, C.E., F.G.S., OFFICE.—13, AUSTINFRIARS, LONDON.

Mr. HOPKINS'S OFFICE is SUPPLIED with PLANS and SECTIONS of the principal MINES in the UNITED KINGDOM.—The REPORTS, and all essential particulars, are faithfully and regularly RECORDED; these, together with possessing a thorough practical knowledge of the business in all its details, and being ENTIRELY FREE FROM SHARE DEVIATING, renders the office a proper, and as yet the only, place where DISINTERESTED INFORMATION can be OBTAINED.

The object of the office is to communicate information on all subjects connected with General Science—on Mineral Properties in all parts of the world—to protect legitimate Mining—to see justice done to the Capitalists and Property, and to point out the necessity of placing such speculations in the hands of responsible business men. Capitalists, will, therefore, have themselves to blame, if they allow their property or capital to be wasted by jobbing and inefficient managers.

Annual clients are regularly supplied with every information that may be required on home and foreign speculations.

GENERAL MINING OFFICES, 23, Threadneedle-street, London.

**MR. JOSEPH JAMES REYNOLDS, late of CAMBORNE, CORNWALL**, begs to inform his friends and the public that he has COMMENCED BUSINESS as a MINING and GENERAL AGENT at the above office, and trusts, by paying a due regard to the welfare of his clients, that he will at all times merit their confidence. Having been connected with the management of mines in the most productive districts of Cornwall upwards of twenty years, and being in communication with some of the most respectable agents in the mining districts, Mr. Reynolds will be enabled at all times to furnish such information as may be relied on.

MR. REYNOLDS has SHARES FOR SALE in the following MINES:—Black Craig and Grainger, Bargally, Bodmin Consols, Calstock Consols, Carnvann, Cook's Kitchen, Daren, East Caradon, East Wheal Frances, East Pool, East Wheal Rashleigh, Great Wheal Badden, Great Sheba Consols, Great Bryn Consols, North Pool, North Fowey Consols, North Tolgu, North Wheal Alfred, Okel Tor, Pendarves and St. Aubyn, Rocks and Treverbyn, South Frances, South Condurrow, Sydney Goldolphin, South Phoenix, Trebell Consols, West Bassett, West Stray Park, Wheal Emma, Wheal Gill, Wheal Lovel, Wheal Susan, Wheal Unity, Wheal Zion.

J. J. REYNOLDS will carry on business upon COMMISSION ONLY, making no intermediate price between buyers and sellers, and will be ready at all times to introduce the buyer and seller of any shares to each other.—Office hours Ten to Four.

**MESSRS. FRANCIS & CO.**, in order to avoid the complicated and indefinite system of CALLS for working or proving mines, consider that a better and more satisfactory one will be found in offering the public those chiefly in which the machinery and underground work required to bring them into a state of profit has been completed and paid for.

In mines thus far advanced, it will be obvious that as there will be no risk, so there can be no necessity for calls—the speculative part of the adventure having been gone through; and in this way capitalists will be enabled to invest with the certainty of immediate return.

MR. MATTHEW FRANCIS takes leave to announce, that he has several THOUSANDS of POUNDS WORTH of SHARES to DISPOSE OF, which, at the selling price, give a profit of from £20 to £40 per cent.

Offices, No. 7, John-street, Adelphi, London.

**MR. THOMAS JORDAN, METAL BROKER**, No. 75, OLD BROAD-STREET, CITY, exclusive AGENT for one of the BEST MAKERS of HAMMERED IRON, for MARINE, LOCOMOTIVE, and other ENGINES. Also AGENT for the SALE of SOUTH STAFFORDSHIRE and WELSH BAR, BOY and BOILER PLATE IRON, in all its varieties.

The Proprietors of Lead and Copper Mines in Devon, Cornwall, Wales, &c., will find great advantage in the quality and cheapness of the Iron they require, by seeking quotations through the Advertiser.

**MINING OFFICES, REDRUTH.—JOHN ROBERT PIKE**, GENERAL SHAREBROKER (on Commission only), being resident in the centre of the Mining district, POSSESSES great FACILITIES in the DISPOSAL OF or PURCHASING SHARES, INSPECTING MINES, &c., on the most moderate and honourable terms.

**MINING INVESTMENT.—T. FULLER and CO., No. 51, THREADNEEDLE-STREET, LONDON**, beg respectfully to inform the public that they are in a position to BUY and SELL in all the DIVIDEND-PAYING MINES, which upon present purchase will pay from 15 to 25 per cent., and have on hand Bedford United, Devon Great Consols, Mary Ann, Trevaun, West Caradon, Great Wheal Friendship and Venton, Boringdon Park, Wheal Catherine, Franco, Zion. Also shares in Wheal Williams—this is a continuation of the Devon Great Consols, and embracing several of the same lodes; also Devon Consols North—this adjoins the latter, which, with £1 paid, are marketable at £300, and paying £48 per annum in dividends.—Every information given, either personally or by letter.—Office hours Ten to Four.

**MR. PEET, MINING AGENT and GENERAL SHARE BROKER**, has REMOVED to the ABOVE CONVENIENT OFFICES. The same attention paid as hitherto to all MINING BUSINESS of legitimate character; and in thanking his friends for former commissions, he solicits a continuance of their kind support.—OVERSEERS of Wheal May, Pentire Glaze and Pentire United Mines, Devon Consols West, and Wheal Hamlyn.—The strictest confidence observed in all transactions, and the registry of shares will be free, unless a sale or purchase takes place.

**MR. GEO. CARNE, DEALER IN STOCKS AND SHARES**, 23, THREADNEEDLE-STREET, LONDON.

**MR. JOHN DAVIES, MINING SHAREBROKER**, No. 38, TOWER-BUILDINGS, TOWER-GARDEN, LIVERPOOL.

**MOLYNEUX & CO., MINE AGENTS, No. 34, THREADNEEDLE-STREET**, have SHARES ON SALE in DIVIDEND-PAYING and OTHER MINES, which will ensure to CAPITALISTS the safest and most unexceptionable investment.

Offices of the Wheal Langford and Baring United Mining Company, and Trevellick Consols Mining Company, No. 34, Threadneedle-street.

**SHARES are TO BE SOLD in the following MINES,**

LEVANT	WEST ALFRED CONSOLS	WEST WHEAL TOWAN
Wheal Reeth	Wheal Franco	Wheal Henry
Balldewidden	Providence Mines	Leland Consols
Wheal Margaret	Great Work	East Balldewidden

Barque LEGERDEMAIN ..... A 1, 13 years—2 years old.  
TELL TALE ..... A 1, 12 years—clipper schooner.  
CHARLOTTE ANNE ..... A 1, 12 years—ditto  
B. P. BATTEN, 1, Crown-court, Old Broad-street, London.

### REGISTRY FOR THE SALE AND PURCHASE OF MINING SHARES.

DURANT & CO., MINING SHAREBROKERS, 38, LOMBARD-STREET, LONDON. Beg to draw the attention of Capitalists to their REGISTRY for the SALE and PURCHASE of SHARES.

DEVON GREAT CONSOLS	Wheal Mary Ann	South Caradon
Carn Brea	Wellingtons	Great Wheal Sheba
West Caradon	West Buller	Trevellick
Trelawny	Tolgu	Bedford United

N.B.—Statistical information furnished on British and Foreign Mines.—No CHARGE made for the registration of shares unless business be transacted.

### TESTIMONIAL TO MICHAEL WILLIAMS, Esq.

The Committee beg to announce that subscriptions may be paid to the East Cornwall Bank, at Liskeard and Bodmin; the Cornwall Bank, Truro, Redruth, and Falmouth; Messrs. Bolland, bankers, Falmouth and St. Ives; Mr. Carne's Bank, Falmouth; or either of the following gentlemen—viz.: Mr. H. Grylls (the Treasurer), Redruth; Mr. R. Pearce, Penzance; Mr. S. James, St. Just; Mr. R. R. Mitchell, Marazion; Capt. Thomas Richards, Foundry House, Hayle; Mr. R. H. Pike, Camborne; Mr. W. Burgess, Dlogon; Mr. Pryor, Town-hall, Redruth; Mr. Little, Redruth; Mr. E. H. Hawke, Tolgu, St. Day; Mr. H. Pearce, Royal Hotel, Truro; Mr. R. B. Broad, Falmouth; Mr. J. Morcom, St. Austell; and Mr. Field, Mining Exchange, London.

No subscription to exceed Five Shillings. Any smaller sum will be received. The list to be closed on the 29th November. Redruth, Oct. 9, 1851.  
THOMAS GARLAND,  
Hon. Secretary to the Committee.

### MR. T. P. THOMAS, MINE AGENT, 75, OLD BROAD-STREET.—Established nine years.—Mr. T. P. THOMAS begs to inform capitalists and the public that he is at all times in a position to BUY or SELL, at close market prices, in dividend and respectfully established BRITISH and FOREIGN MINES; and having a local knowledge of the principal Cornish and Welsh Mines, from periodical personal inspection, &c., will be happy to furnish information by post or otherwise.

N.B.—Mines inspected and reports furnished.

**MINING PROPERTY.—MR. HERRON has SHARES in** the best DIVIDEND-PAYING MINES FOR SALE, and which will give the purchaser 15 to 20 per cent. for the outlay. Amongst others are the following:—

Trehane	Dollack	Lewis
Cobro <th>Levant</th> <th>Devon Great Consols</th>	Levant	Devon Great Consols
St. John del Rey <th>East Wheal Rose</th> <th>Trevellick</th>	East Wheal Rose	Trevellick
Condurrow <th>West Caradon</th> <th>Trevellick</th>	West Caradon	Trevellick
West Providence <th>Mary Ann</th> <th>South Tolgu</th>	Mary Ann	South Tolgu
Alfred Consols <th>Wheal Margaret</th> <th>Bryntall</th>	Wheal Margaret	Bryntall

And has also FOR SALE SHARES in MINES having a PROMISING APPEARANCE, and affording greater range for speculation, such as—

South Tamar	West Alfred Consols	Garrig
Merlyn <th>Trevellick</th> <th>West Towan</th>	Trevellick	West Towan
East Buller <th>Trevellick &amp; Roseve</th> <th>East Wheal Reeth</th>	Trevellick & Roseve	East Wheal Reeth
North Downs <th>St. Aubyn &amp; Grylls</th> <th>Kilbricken</th>	St. Aubyn & Grylls	Kilbricken

**MR. JOHN PHILLIPS, MINERAL SURVEYOR and MINE MANAGER, MARGARET-STREET, NORTH ADELAIDE**, in the province of SOUTH AUSTRALIA, after three years' residence and two years' exploration in the colony, RESERVES his EXPERIENCE for BRITISH CAPITAL: awaiting the result of this advertisement in a suitable remuneration for past time and future services.

**MR. ALFRED SENIOR MERRY, DEALER IN COBALT and NICKEL ORES, and ASSAYER in GENERAL.**—Address: LEE-CRESCENT, BIRMINGHAM.

**GOLDENHILL COBALT, NICKEL, COLOUR, and CHEMICAL WORKS, NEAR NEWCASTLE, STAFFORDSHIRE.**  
JOHN HENSHALL WILLIAMSON, MANUFACTURER and REFINER.  
Reference.—Professor Miller, King's College, London.

**MONEY.—FIFTEEN THOUSAND POUNDS are ready** to be ADVANCED, at a low rate of interest, upon approved LEASEHOLD or FREEHOLD PROPERTY, in sums of not less than £200.—Apply to Mr. C. Chadwick, No. 28, Broad-street-buildings, City.

**TO GOLD MINING COMPANIES.—A Gentleman of considerable experience** in the mode of Washing and Separating the Gold from its Matrix, &c., and has a full Machinery on different principles for that purpose, one of which is so portable that two persons can carry it to any place where there is but a small quantity of water, and would wash more soil in one day than seven persons could do by the usual methods, and only requiring one man and a boy; or it might have wheels applied to it, so that a man or a mule might be able to draw it any distance with ease. He also understands the processes of Assaying and the Smelting of Ores; is a good and experienced Mineralogist, and perfectly understands the nature of the soils and country likely to be auriferous; also those places likely to contain the precious stones, is anxious to OBTAIN EMPLOYMENT as SUPERINTENDENT or CHIEF COMMISSIONER to any of the new forming companies, as he has held a similar employment in South America.—Address, "W. T." Mining Journal Office, 26, Fleet-street.

**PURSER and SECRETARY WANTED IMMEDIATELY** for a MINING COMPANY.—Apply by letter (pre-paid), stating qualifications and references, to "A." care of Mr. Thomas, newspaper and advertising office, 1, Finch-lane.

**WANTED.—A PARTNER in a very desirable COLLIERY**, well situated, in the WIGAN DISTRICT. The colliery will in a few months be in full working order, the mines having been sunk to and proved, and will then be capable of raising 1000 tons per week. There is a railway already completed to the Leeds and Liverpool Canal, which forms the best communication with Liverpool, Manchester, Runcorn, and the intermediate markets. The mines are of excellent quality, and held under favourable lease.  
For further information, and to treat, apply at the offices of Messrs. Darlington and Taylor, in Wigan; or to Mr. John Mercer, surveyor, St. Helens.  
Wigan, October 22, 1851.

**WANTED.—By an active young Scotchman, respectfully connected, and who has had a liberal education, with some years' experience in the office and business of an extensive Mercantile and Manufacturing Establishment in the Metal Trade, a SITUATION as BOOK-KEEPER, CLERK, or TRAVELLER.** Unexceptionable references.—Address (free) to "W. M. L." care of Messrs. Robertson and Scott, advertising agents, Edinburgh.

**WANTED, at the LLWIN CELYN COLLIERY, CWM RHONDDA, GLAMORGANSHIRE**, a Person well acquainted with the WORKING and RAISING OF COALS, to undertake, and contract for, working and delivering of at least One Hundred Tons per day of Large Coal, into the Railway Wagons, from pit just completed, within a few yards of the railway. Payments every fortnight.  
For further particulars, enquire of Mr. Christopher James, Swansea; or Mr. D. W. James, Merthyr; or Mr. Alexander Edwards, on the premises.—October 13, 1851.

**WANTED.—ARSENICAL PYRITES**, containing not less than 24 per cent. of copper, and from 33 per cent. of arsenic. Those having such at their disposal, can communicate with "B." at the office of the Mining Journal, 26, Fleet-street, London.

**CRUDE BARYTES**, of an excellent quality and colour, can be OBTAINED ON REASONABLE TERMS, by applying to Bennett, Justice, & Co., Derrochanman Mine, Ballydehob, county Cork. Samples will be sent free of cost to merchants or manufacturers who require them.—Dated Sept. 30, 1851.

**TO CAPITALISTS.—ON SALE, SHARES in the best** DIVIDEND-PAYING MINES, to pay the buyer from £15 to £20 per cent. per annum, and SHARES in INSURANCE and other JOINT-STOCK COMPANIES, to pay the buyer 45 per cent. per annum and upwards.—Apply to James S. Tripp and Co., Lombard-street Chambers, 33, Clement's-lane, City.

**STEAM-ENGINES.—A BARGAIN.—FOR SALE**, an elegant 3-horse upright CONDENSING ENGINE, as good as new, with boiler, &c. Also, a PAIR of OSCILLATING CONDENSING 20 H.P. ENGINES, or 10-horse each, in thorough repair and of modern construction.—Apply to Spiller & Taylor, Battersea.

**PROPOSED NEW VINEGAR MANUFACTORY.**  
As a PROFITABLE INVESTMENT.—Some important CHEMICAL IMPROVEMENTS having been lately made and rigidly tested in the MANUFACTURE of VINEGAR, the Inventor and Proprietor—who has had 30 years' practical experience in the business—wishes to TREAT with a CAPITALIST or COMPANY, for the purpose of MANUFACTURING the ARTICLE on an extensive scale, from which a handsome dividend can be realised, without the slightest risk, and so pure and exquisite a vinegar produced, that it cannot fail to command a ready sale.—Letters addressed to "A. A." care of Mr. G. Jarvis, 38, Great Castle-street, Regent-street, London, will open a correspondence.

**A VE MARIA GOLD QUARTZ MINE.—DISTRICT OF MARIPOSA, CALIFORNIA.**—Applications for shares in this mine are to be made at the office of the Association, 114, Bishopsgate-street-within (where all particulars may be had); or Messrs. Watson and Cull, St. Michael's-alley, Cornhill, London; Mr. John Davies, 38, Tower-buildings, Liverpool; and Messrs. Hughton and Dobson, 16, Royal Exchange, Edinburgh.

**ALLT-Y-CRIB SILVER-LEAD MINES.**—Notice is hereby given, that a DIVIDEND of FIVE SHILLINGS per share has been declared, and will be PAYABLE in November, at the offices of the Company, No. 7, John-street, Adelphi.

**ROYAL SANTIAGO MINING COMPANY.**—The Directors of this Company hereby give Notice to those proprietors who have OMITTED to PAY their CALLS, that, after the 31st instant, the ABSOLUTE FORFEITURE of all SHARES not then paid up will be completed without further notice.  
Broad-street-buildings, October 24, 1851.

**BLAENAVON IRON COMPANY.**—Notice is hereby given, that an EXTRAORDINARY GENERAL MEETING of the Shareholders of this Company will be HELD at these offices, on Friday, the 14th day of November, 1851, at One o'clock precisely, in order to take into consideration the propriety of authorising the Board of Directors of the said Company to borrow, and take up at interest, on behalf of the same, the sum of £50,000, from any person or persons willing to advance the same on mortgage of the freehold and leasehold, and other chattel, property of the Company, and for such term of years, and upon such terms and conditions, as the Board of Directors shall think proper; and to make and pass such resolution or resolutions, and to execute such instruments relating thereto, as may then be agreed upon.  
By order of the Board of Directors,  
JAMES BOSTH, Secretary to the Board.  
Offices, 4, Panzer's-lane, London, Oct. 24, 1851.



## ON THE SULPHITES, NITRAMINE, TOLUIDINE, &amp;c.

[We promised our readers to return shortly to the subject of Dr. Muspratt's technical and his discoveries. The fame of the Liverpool Professor, and to his honour be it said, now equals, if it does not exceed, that of any British chemist. His contributions to science, and his School of Chemistry, are a world's talk; and the popularity he has given to science places him, side by side, with his illustrious preceptor, whose celebrity in this country may in a great measure be ascribed to the prominent part played by his once "favourite pupil." The *Lancet* has said—"Of Dr. Muspratt's merits as a scientific chemist we need not write one word; his reputation is not confined to our own schools or our own country; and he is supported by testimonials from celebrated chemists at home and abroad, such as few other men could obtain." and the *Esaminer* writes—"To add one word to such encomiums would be as presumptuous as superfluous." Dalton has made Manchester as renowned in science as in manufactures. What did he get for it? Fame. Dr. Muspratt has made Liverpool as great in science as in commerce—What has he got for it? Nothing; he had fame before he went there. This is the way enlightened England treats her "glories!" On the recent Royal visit, we think that the Sovereign of this mighty realm might have bestowed some honour upon the founder and successful principal of the Liverpool College of Chemistry. We feel convinced that all the friends (and among them we might number some of the brightest names in science or literature) of Professor Muspratt would have felt rejoiced at the bestowal of any Royal favour upon one so well entitled to the admiration of the country. Charles Dickens, our great writer, said some time ago, "I sincerely hope that Liverpool will one day—and not long hence either—endeavour to find some expression for the obligation she owes to Dr. Muspratt." We re-echo the sentiment, and trust that the birthplace of Roscoe will prove an exception to the ancient proverb, that "a prophet is not honoured in his own country." We could, with pleasure, write volumes upon this theme, for Dr. Muspratt was one of our earliest contributors, and we have ever entertained the highest respect for his genius and mainly worth; but his position cannot be rated by any praise of ours. The following is the continuation of his early testimonials.—*Ed. Mining Journal.*]

Baron BENZELIUS.—Although I have not the honour of a personal acquaintance, still your name is well known to me by the new facts which the science we cultivate in common has acquired by your investigations. It affords me real pleasure to give you a testimonial, which you will see appended. Having been requested to state my opinion upon the chemical investigations which Dr. Muspratt has published alone, as well as upon those brought out in conjunction with Dr. Hofmann, I can testify with much pleasure that they have contributed to enrich chemistry with new facts of very great interest.

Professor DUMAS, in introducing him to Professor Regnaudet, wrote:—"His name is a sufficient recommendation."

Dr. FRIEDEMANN.—During the residence of Dr. Muspratt in Giessen, he devoted himself strenuously to the study of practical and theoretical chemistry. Although he possessed a sound knowledge of the science when he came, still he recommended in Liebig's laboratory the practical part, in order to familiarise himself with all the methods of analysis. When this was accomplished, he undertook investigations both in inorganic and organic chemistry. The extreme diligence and carefulness exercised by Dr. Muspratt, as well as the fine results with which he enriched science, are appreciated only by a perusal of his scientific and literary publications, which are his worthiest and best certificates.

Dr. C. BENHARDT (Professor of Pharmacy in the University of Bonn).—Amongst the researches published of late years in organic chemistry, those of Dr. Muspratt deserve great attention, as they show that the Doctor not only possesses a high degree of proficiency in experimenting, but furnish proof that he is a perfect master of the theory of the science. From these circumstances, his researches have obtained general consideration and acknowledgment, and have been regarded as excellent additions to chemistry. Of these investigations I shall mention the production of valerianic acid from indigo; his treatise on new processes in which aniline is formed, published jointly with Dr. Hofmann. These results in organic chemistry could only originate in a perfect knowledge of the facts which are taught by inorganic chemistry; and Dr. Muspratt's researches on the sulphites show that he has also contributed to enrich the latter.

Professor KUHLMANN (of Lille).—The opinion which I should pass upon your investigations would be of little value after the illustrious Professor of Giessen has made a just appreciation of them. This favourable testimony, independently of being confirmed by other distinguished authors, as in France by Prof. Laurent, must insure you the goal to which you aspire. To such a testimonial I cordially subscribe; but it cannot acquire more force by this. I can scarcely express to you the great desire I feel to see you soon in a position in which you can give yourself up entirely to the teaching of a science which possesses all your affections, and in which I am happy to find an adept like yourself, capable of extending its limits. I shall receive with the greatest delight the promised copy of your work on the Blow-pipe. In editing this work you have acquired another right to the gratitude of chemists. Every chemist must have read with great delight your last essay, in which you were engaged with Dr. Hofmann, concerning the discovery of a new alkaloid—toluidine, and which you have rendered so remarkable by its analogy to aniline.

Dr. H. ROSE.—Dr. Muspratt, of Liverpool, has published several investigations in Liebig's *Annalen der Chemie und Pharmacie*, which prove that he is an excellent chemist, and, therefore, entitled to great expectations.

Dr. CLAUDE MARQUANT (chief of the Pharmaceutical Institute of Bonn), in a letter to Dr. Hofmann says—"I have read attentively the memoirs published by Dr. Muspratt, and that by so doing an opportunity has occurred of observing his thorough knowledge of inorganic and organic chemistry; in the former, his profound and comprehensive labour on the sulphites shed a new light on that department of the science, by demonstrating the interesting analogy subsisting between the sulphites and carbonates. Of equal importance appear to be his experiments on the pretended formation of valerianic acid from indigo."

[We have now translated the leading foreign testimonials. If the above are the opinions expressed on Dr. Muspratt's attainments nearly 10 years ago, what pride the writers of them must now feel with respect to them? Within the hour we have received Dr. Muspratt's last paper on *Chromogenic Acid*, a new acid from clove, which will be soon reviewed in our columns.—*Ed. Mining Journal.*]

## ATMOSPHERIC INFLUENCES.—NEW SERIES.—No. XII.

BY FRANKLIN COXWORTHY, AUTHOR OF "ELECTRICAL CONDITION."

Before proceeding to the consideration of another important feature connected with evaporation, which our apparatus has brought to light, we are induced to offer a few remarks on the comparative value of the electrometer as an indicator of epidemic diseases, either of the animal or vegetable kingdom; and it will be observed, on reference to the table given in the Journal of Sept. 20th, that the means of 1845, 1846, 1847, 1848, and 1849, are 36, 30, 31, 31, and 27. The potato disease commenced in 1845, and raged in 1846, progressively declined during 1847 and 1848, and disappeared in 1849—therefore, the indication of 1846 should be equal to that of 1845, and greater than those of 1847 and 1848, a discrepancy that will not be found in the scales; and if the information afforded by the electrometer be applied to the epidemics of the animal kingdom, it will be found no less wanting. The indications of the instrument are governed, in fact, mainly, if not entirely, by the "temperature" of the air—it has no connection with the earth—and in this respect affords strong evidence, if such were needed, of the identity of electricity with cold instead of with heat.

We have already adduced evidence that evaporation is not referable to "heat," and it being evident that this fact cannot fail in directing attention to the several purposes to which heat is applied, and, possibly, in suggesting a modification in the appliances by which it is generated, the truth of this subverting principle cannot be too forcibly impressed. On reference to our register for the month of September, 1851, we find that, from the 2d to the 6th inclusive, the mean temperature was 67°, 67°, 64°, 59°, and 57°; whilst the total evaporation for each day respectively was, in grains, 260, 270, 240, 405, and 360; so that, with a decrease of temperature of 10° from the 2d to the 6th, there was induced more than double the amount of evaporation, the weather throughout the period being beautifully fine, and the wind in much the same direction, from north to north-east. We could, however, likewise adduce instances in which a decrease of temperature is attended with decrease of evaporation, and an increase of temperature with increase of evaporation; but sudden changes are generally, if not invariably, adverse to existing doctrines; and on this question the following statement cannot fail in exciting much interest:—

Date.	Mean temp.	Reduced scale.	Evap. grains.
1850—July .....	63°	30	11,515
August .....	61°	29	12,300
September .....	56°	24	9,460
October .....	49°	17	5,730
November .....	46°	14	5,010
December .....	40°	8	1,855
1851—January .....	43°	11	4,125
February .....	39°	7	2,695
March .....	42°	10	3,285
April .....	46°	14	5,970
May .....	53°	21	10,625
June .....	59°	27	15,075
July .....	64°	32	19,895
August .....	63°	31	18,530
September .....	58°	26	9,570

In our papers of 1847, a comparison was attempted of evaporation and temperature, but our vessels having been then replenished by measures, and not by weight, we are not induced to draw any comparison between the results then afforded and the above; nor do we place reliance on the mean temperature of Sept., 1851, having been absent from home from the 11th to the 28th inclusive, the mean is, therefore, that of the remaining days.

The faulty nature of the thermometer in use in this country has frequently been the subject of comment, but the evil has hitherto been endured, because the remedy was not imperative. It must be obvious, however, that an addition of 32° to the real temperature of July will merely double the amount, whilst a similar addition to that of December (8°) increases it fourfold—a discrepancy that must be fatal to any comparison between "temperature" and evaporation. We have, therefore, taken the liberty of reducing the scale to the real representative figures, between which and the evaporation the proportions are drawn. An alteration in the scale of the thermometer is now imperative, and the adoption universally, of an instrument divided into 300° from the freezing to the boiling point, as suggested some time since in the *Journal*, would unquestionably be a great improvement.

It will be observed, on reference to the above statement, that June stands highest, both as regards actual evaporation and proportion to temperature; and although it may be remarked that, whilst it rained 14 days in July, and only 5 in June, still there were only 5 wet days in Aug., but 15 in March, and 19 in April—a circumstance to which we are induced to direct attention, it being a fact worthy of notice that the evaporation is frequently greater whilst it is raining than it is a few days before rain. We have much to learn on this highly interesting subject, and our results having been published since 1847, we did hope that long ere this our apparatus would have been tested, and, if found correct, applied by the Government to the solution of so important a question, identified

as it is with the diseases of the animal and the vegetable kingdoms. For the reasons already assigned we are not desirous of drawing a monthly comparison between the evaporation of former years and the present period; but the evaporation of the potato disease being so enormous, as to place out of question the small difference being referable to error, we are induced to tabulate the results given in the *Chemist* for Sept., 1847, the ounces being reduced to grains, and we should observe that the thermometer was not then, as it now is, kept under the same roof with the evaporating dishes.

Date.	Mean Temp.	Red. scale.	Evap. grains.
January .....	38°	6	2,760
February .....	38°	6	6,240
March .....	41°	12	10,980
April .....	47°	15	14,400
May .....	53°	26	22,560
June .....	60°	34	31,160
July .....	67°	35	29,980
August .....	64°	32	17,280
September .....	62°	30	16,320
October .....	52°	20	8,160
November .....	48°	16	6,240
December .....	35°	3	2,760

Prof. Gorini, who is professor of natural history at the University of Lodi, has made a very remarkable experiment illustrative of his theory as to the formation of mountains. He melts some substances, known only to himself, in a vessel, and allows the liquid to cool. At first it presents an even surface, but a portion continues to ooze up from beneath, and gradually elevations are formed, until at length ranges and chains of hills are formed, exactly corresponding in shape with those which are found on the earth. Even to the stratification the resemblance is complete, and M. Gorini can produce on a small scale the phenomena of volcanoes and earthquakes. He contends, therefore, that the inequalities on the face of the globe are the result of certain materials, first reduced by the application of heat to a liquid state, and then allowed gradually to consolidate.

THE POST-OFFICE LONDON DIRECTORY FOR 1852.—The fifty-third annual edition of this useful work has just appeared; and, judging from its contents, it is by no means inferior to its predecessors, and fully sustains the reputation it has so well earned, as being the only correct key to the names and addresses of the several trades and professions in this vast metropolis. A new feature appears in this edition, which has hitherto been omitted—we allude to the scientific directory, which gives the names and addresses of the members belonging to all the scientific institutions, societies, and learned bodies. In addition, there is a general alphabetical directory, professional directory, classification of trades, court guide, guide to all the Government offices, Parliamentary companion, list of bankers, street key, postal information, conveyance, miscellaneous information, together with a map of London, corrected up to the present time. As a work of reference it is decidedly most useful and necessary to the man of business. No banking or merchant's office should be without it. A smaller edition has likewise been published, which, though not so comprehensive as the larger, contains an immense mass of useful information, and both the works are eminently entitled to the name of "handbooks to the commerce of the first commercial city in the world."

SERIOUS CHARGE OF CLOSING UP A COAL MINE.—At the Court House, Wakefield, Mr. Marsden, solicitor, on the part of Messrs. Stansfield, and Co., of Flockton, coal proprietors, preferred a charge against H. Hobson, a miner in their employ, for obstructing an air-gate in a coal pit, in which he worked.—Mr. Marsden said that although the case was one which, under the circumstances which would be detailed to them and proved, in some degree merited the severe punishment to which the defendant would be liable by treating it as a felony, and sending it to the Sessions for trial, he thought he should not do so, but simply treat it as one of breach of duty in the defendant towards his employer, under the Servants' Act. Mr. Marsden then detailed the case, and called defendant's fellow workman, who proved that on the 26th Sept., he was in the coal pit of the company, at Flockton; that he went to the bank at which defendant was working. Their was stopped, and down behind the defendant, in the air-gate, he found that two turn boards had been fixed, and his clothes laid on the top, which had the effect of stopping the air to the rest of the pit. He told him the danger of his conduct, and he then began to pull them down. The following day, finding there was more fire-damp in the pit than usual, he again went to Hobson's bank, and found the air blocked out again in the same manner. He said he would tell the bottom steward, and did so accordingly. Defendant said he might do so. By Mr. Wainwright: Defendant was nearly naked when I told him of it; he said he had done it because it blew so cold upon him, it starved him. The air was nearly all blocked out: there was a small opening left. It would be a hole of not more than about 10 inches by 6 or 7. A Micklefield, a hurrier for the defendant, proved that he saw the defendant do the act complained of. J. Ramsden, the bottom steward, proved the finding the air blocked in the manner described. He asked defendant what he had done for it. Defendant said because it starved him to death. Witness told him that it would burn them all to death; the defendant then set about pulling them down; 104 persons were working in the pit, whose lives were all risked by defendant's conduct. Mr. C. Morton, the Government Inspector of Mines, said he had examined the pit and plan alluded to, and considered that the lives of all the men in the pit were in danger during every moment the obstruction continued. The pit was of itself a very dangerous one, and rendered the use of the Davy-lamp, absolutely necessary. Mr. Wainwright said he could not but feel that defendant was indebted to the prosecutor for treating the case in this summary manner; he, however, called the Court's attention to the fact that defendant was working close on the spot, and his own life might be said to have been in the most imminent danger. It was clear the defendant had acted ignorantly; and after other remarks he produced a certificate from a medical man, to show that defendant had been of very weak intellect from his infancy. And then said he would leave the case in the hands of the Court, in the hope of their dealing conscientiously with his client, which he thought he was, under defendant's circumstances, entitled to ask. The chairman said that had it not been for the apparent ignorance of the defendant, and the certificates produced, he should have sent the case to a higher tribunal. Such a case deserved transportation, or other severe punishment. The Court would, however, treat it summarily, and sentenced him to the House of Correction for three months, with hard labour; and he hoped that it would act as a warning to all persons in similar circumstances.

RAILWAY TIMBER.—The process of preparing the timber after its conversion is one of much interest, and shows the advance which has been made in these processes under the stimulus which has been afforded by the increase of railway works. The timber, when converted, is raised upon railway trucks, packed in a convenient cylindrical shape, and wheeled into the cylinder prepared for its reception. These cylinders have somewhat the appearance of long engine boilers or large tubes, and the railway traverses it. When the truck of timber has been conveyed into it a steam-engine connected with an air-pump is set to work, and the air is exhausted from the interior of the cylinder. When this process of exhaustion is partially completed, the preparation of creosote or chloride of zinc (as the case may be) is turned in, and when the timber is surrounded and the cylinder filled with the solution, a force-pump is used, by which it is injected into the pores of the wood, the pressure being as high as 150 lbs. to the square inch. The cubic contents of the wood being also known, the injection of the solution is continued until the proper amount is absorbed by the wood. This process occupies about two hours and a half. The solution is then drawn off, and the preservative process being completed the timber is withdrawn, and another load follows. On sawing through the timber it is found that the solution has penetrated to the very centre of the timber, such is the effect of the hydraulic pressure employed. The effect of the application of the Burnettising process—the chloride of zinc—is barely apparent on the exterior of the timber, which is only slightly coloured, whilst that submitted to the action of the essence of tar, or creosote, is blackened. The timber can be "Burnettised," at a cost of about 12s. per load, and is then impervious to the effects of damp or insects, and is, in fact, nearly indestructible.

MINING IN IRELAND.—A lease has just been taken of Mr. R. Notter's Kilbarry Mine, Kilmoe, by a highly influential party of private gentlemen, of London; and, within the last few days, Mr. Henry Thomas, the manager of the Crookhaven Mining Company of Ireland, has received instructions to proceed at once with the preliminary works, previous to extended operations. We congratulate the gentlemen embarked in this promising concern in the choice of their manager. We believe a better selection could not be made. At the Crookhaven Mine the works are progressing vigorously and satisfactorily. During the last fortnight we are informed that 1000. worth of rich copper ore has been raised. The new engine-shaft is being sunk with great spirit; the engine boiler and crusher-house are let to build by contract, and the steam-engine, crusher, and all the mining materials, recently purchased at the Barristown Mines, county of Wexford, are expected at the mines in another fortnight. The works in every department are prosecuted with business-like energy, and the prospects indicate a rich and lasting mine.—*Cork Reporter.*

STEAM NAVIGATION.—After the 31st March next no steam-vessel is to proceed to sea, or to steam upon the rivers of the United Kingdom, without having a safety-valve upon each boiler, free from the care of the engineer, and out of his control and interference; and such safety-valve is to be deemed to be a necessary part of the machinery, upon which the engineer-surveyor is to report to the Board of Trade. This new regulation is ordered by the 21st section of the Act 14 and 15 Vic., cap. 79.

HOLLOWAY'S PILLS A MOST DESIRABLE AND EFFECTUAL REMEDY FOR BILIOUS COMPLAINTS AND DYSPEPSIA OF THE STOMACH.—Extract of a letter from Sir James to Prof. Holloway, dated July 8, 1851.—"Sir: For a considerable time I laboured under a severe bilious complaint, and never could digest anything that I ate; in consequence of which I passed many sleepless nights. I tried various remedies without obtaining any relief; I then betook myself to using your invaluable pills, which have wrought a perfect cure, and I now feel quite well, and enjoy my food better than ever I did in my life. Signed, J. P. C. Van de Lande Paramaribo."—Sold by all vendors of medicine, and at Professor Holloway's establishment, 244, Strand, London.

## Original Correspondence.

THE GERMAN SCHOOL OF GEOLOGY.—No. V.

BY DAVID MUSHET, ESQ.

I am surprised to a degree how Mr. Faber could venture such an argument in the face of the most certain facts. Insoluble as quartz is by mechanical applications, its crystals are one of the commonest occurrences in Nature throughout every kind of rock; whence some silicious and calcareous petrifications, tufas, stalactites, which we may see formed before our eyes, if Mr. Faber's argument has the slightest basis. Flints, agates, and other silicious pebbles, are considered to bear indisputable proofs of their aqueous origin—seeds and the minutest fibres of vegetables being replaced by silicious depositions. Surely Mr. Faber knows all this. The great quantity of potash in the primitive rocks makes their formation from aqueous solution a matter of less difficulty, if there is any difficulty at all in believing what we see, than that of any other series. Mr. Faber, of course, knows the liquor of flints—a soluble jelly when moist, but absolutely insoluble after it has congealed. The laboratory of Nature is replete with solvents and re-agents for all her purposes. Water is the grand menstruum in which she forms everything by the electric influence—the complicated organisms of animal life, the intermediate structures of vegetables unfixed with locomotion, and the inferior, but also organised, body of the terrestrial sphere—the crust, the bark, which covers and conceals the interior. The objection to aqueous deposition, on the score of the different specific gravities of the components of the primitive rocks, is equally an empty syllogism, to prove that what is cannot be. It would apply with just the same force to the admitted aqueous rocks. We do not find the mica lying at the bottom of them, but interspersed through their mass, though hundreds of yards in thickness, mixed with the other earths, perfectly irrespective of their mutual specific gravities. Indeed, this argument, if pushed, would forbid the formation of mica at all. The iron should separate from the lighter components; and, in short, as I have already shown on the vaporous examination, the whole intermingled texture of the earth ought to be a series of concentric layers—sulphur and carbon, potash and soda at the top, and platinum at the bottom. It is, perhaps, here worth noticing, in reference to the soluble triple salt which alumina forms with potash and sulphuric acid, that the metallic sulphurets are lodged in the felspathic granite, and its congener, the killas—the most aluminous of rocks.

The next objection is not, as far as I am aware, a *fact*—namely, that the quantity of water on the surface of the globe is small. On the contrary, the area of land is a fraction of the area of sea; and if the depth of the latter exceeds, as has been supposed, or even equals the highest dry elevations, the cubic contents are something considerable; but were this objection correct, it would no way affect the argument, because it is quite unnecessary to suppose that all the land was simultaneously dissolved and deposited in a moment from one mother water, but by gradual and successive accretions growing from the south to the north; so that there was no lack of water to suspend each successive increment. But I do not take upon myself to make any assertion as to the original creation of matter, whether or not it was created as a watery solution. It may have been created intensely cold, with every particle, gaseous or fluid, in a solid state—the undecomposed substances, separate and uncombined, lying inert until the conditions necessary for their combination arose. This is just as permissible as to conjecture its creation in a transitory state of heated vapour; or the whole may have been created oxidised as at present, but inert, until the magnetic impulse began; or there may have been only one sort of original matter, as many have supposed, to which the electric influence imparted characteristic forms—a theory which supplants one set of difficulties by another. The first authentic account we have of the existence of the matter of the globe, describes it as covered with water; and the next stage was the moving of a spirit upon it; but beyond this all is speculation, quite out of our reach. My object is not to attempt to describe what creation was, but to check those who enter upon such extravagance. I am not pretending to say what the granite was before it was a rock, as the vapourists do, but endeavouring to lead Mr. Faber and others to look at it as it is. There are always people who know more of their neighbour's affairs than of their own; and there may be those who know as much of the composition of the sun as of the earth they tread on; but I think we ought to know a little more of the latter. It is their home; and it displays its bosom without the slightest trace (volcanoes excepted) of any known form of igneous action; on the contrary, the primitive skin is saturated with water, and abounds with crystals, precisely the same as are exhibited in those other rocks which the theorists admit to have had an aqueous origin. Still, as Mr. Faber assures us that black bottles are an infinitely fine-grained granite, I will do my part by applying the microscope. As to no one denying the igneous origin of basalt, I can assure him that it is very resolutely denied that there is the slightest proof, except assertion, that it had any such source—the existence of water in it, chemically combined as in the granite, being proof against it. The plutonists have thrust in fiery rocks without remorse wherever they pleased, even in the middle of coal seams, without any regard to physical effects; anything that is black was a lava; and a clear-grained granite, with its pure bright colours, uncontaminated in a marvellous manner by the oxide of iron fused along with it, was a lava also. When a theory or a world is to be created, such differences "matter little." As to crystals from volcanoes resembling crystals from slags, that is just what we expect; and, therefore, granite, because it does not resemble such products, is not volcanic. The next fact is, I think, Mr. Faber declining to answer Mr. Hopkins how water is combined in crystals formed from a state of fusion; and I cannot in any way admit his excuse. He says it would lead him too far into chemistry. He must have forgotten upon what assertion of his own this whole discussion arose—viz.: that any beginner in chemistry could prove that mica and felspar could only crystallise from a melted state; therefore Mr. Faber must not avoid this point, or he will convict himself of not being yet even a beginner in chemistry. If he has been deep enough into it to find how this kind of crystallisation is effected, he must oblige us by going down again and bringing the proof up. We do not wish him to avoid it at all—not even the most uneducated of us; in fact, we cannot permit him to avoid it. The retention of a large per centage of water in substances heated higher even than any known heat, is too important a question to be slighted in a short paragraph; and as it is familiar to beginners in chemistry, he must condescend to make your readers beginners also. He is bound to make plain this deep point, or else all that nice painting of the little spheres of felspar and mica will become not merely, as at present, an imaginary picture of what no one has seen, but of what no one ever can see—the most useless kind of invention, the fiction of an impossibility. It is upon this point that my question turned as to the formation of the secondary rocks from the great slag. I had no wish to write a treatise on geology to explain sedimentary formations. I merely inquired how glass from which all the water has been expelled, and the particles aggregated by vitreous fusion, and which constitutes the grand difference betwixt granite and slag, was converted into the aqueous substance of the secondary rocks. The proof from chemistry how the water was retained will be the answer to this question. This is more necessary because, whilst denying that any one has asserted my position, "that the secondary rocks are a soluble detritus of the great slag," Mr. Faber immediately re-asserts it. If fragments of the great slag carried about by water have formed the gneiss and mica schists, what are these pieces but the detritus of that slag? and they must have had some solubility to melt into schist. If such fragments were capable of forming the primitive breccia, I cannot appreciate how no greater amount of solubility than is compatible with a slag, should have originated the silky fibres of those schists in which the remotest traces of conglomeration cannot be distinguished.

Mr. Faber seems to be carried away by the ordinary inadvertency as to the homogeneous nature of the primitive rocks. He writes as if they formed a very definite and unvarying substance. There is a certain general identity; but persons who have given time and attention to the structure of granite mountains, not flying with a cursory glance steeped in theory, looking according to book, will have observed that they are formed of harder and softer parts. The harder form the substance and the summit of eminences; the softer, the sides and valleys, which have been abraded by water, under those circumstances which are admitted to have hollowed out valleys. The former protuberances, where the rock "makes itself," to use the working phrase, are, of course, selected for quarries; the less marketable parts are neglected; and the choice sections of compact rock presented by these excavations pass for the bulk and sample of the deposit. But where Nature or accident provides sections on a less exclusive scale, we find an immense variety of composition, masses and bands of rock devoid of the granitic crystallisation, and totally undistinguishable in that respect from the secondary formations.



To these geologists have given a variety of names, often arbitrary and capricious; for chemical analysis in such variety is impracticable—for the most part, according to colour; but in the following of Adam we must give every thing a name, which often imparts far more satisfaction than a knowledge of the substance which it faintly shadows. Black, red, and white are the principal colours passing as mica, felspar, and quartz. There are all sorts of intermediate shades, from deep purple, green, and yellow, to light grey; but the three first are the predominant tints. When these substances, instead of being separated in thick beds, are intermingled, they form the granites of commerce, and the mixture is more complete in the body than on the flanks of mountain ranges. They are most compact and durable when the quartz predominates, the rib and bond of such ridges. We have specular (not spheres) of mica in a white base, striae of quartz, which sometimes, even in the same quarry, will alter to the red of felspar, coursing through a black base, white crystals in a red base, and mixtures of all three, giving, according to the predominance of mica or felspar, the ordinary red and grey granites, lighter or darker in hue, according to the proportion of quartz. Hills of black rock, where there is no felspar, may be seen intersected with small veins of white quartz, offering a structure so similar to black limestone intersected with veins of carbonate of lime, that it is not a cursory glance will detect the difference of two specimens; and, if I mistake not, such rocks have actually been reported on as limestone by hasty tourists.

[To be continued in next week's Mining Journal.]

#### MINERAL RICHES OF WALES—NANTLLE VALE, CARNARVON.

SIR.—This beautiful romantic valley, which runs in a south-eastern direction from Pen-y-gross, about six miles from Carnarvon, to the foot of Snowdon, has for some years past, although abounding in mineral riches, been comparatively neglected. It is said to have once been an immense forest, and infested by wild beasts, which becoming troublesome as the surrounding population increased, a reward was offered by one of the Henrys for every head that was destroyed; this induced the inhabitants to commence their extermination on a large scale, which they effected by means of fire, but to the total destruction of the forest; this, however, was a matter of little consequence, for in a few years the mountain slopes, for a mile on either side of Nant-Nantlle Lake, became the abode of human industry, in the cultivation of numerous farms, and those beautiful meads that now adorn the entire length of the valley.

In subsequent years the discovery of two immense slate veins, with the knowledge of applying them to useful purposes, induced the natives to open small quarries; and although they were deficient of any means of transit for the produce, except that of being taken to the towns on the backs of horses and mules, yet the workings appear to have been sufficiently remunerative, for we are told that at the beginning of the last century a large quarry was in work, employing many men, who lived up in the mountains. This, no doubt, was part of the old Cilgwyn Quarry, for there are evident traces of very ancient workings. In the course of time roads were made down the mountain, and connected with the shipping port of Carnarvon, with increased facilities for exporting the produce; so the workings progressively increased, and at length they became of such considerable importance, that a public company was formed to construct a railway direct from the quarries to the port, which was at length effected at a large cost. At this date there were 10 or 12 quarries in work, and we are told that from one of them 400 tons of marketable slate was produced weekly; the slate was of the best description, and held in high estimation by the public, and for which there always was, as there now is, a great demand.

About 10 years since two or three of the largest quarries, from some cause which is unnecessary here to explain, were suspended; they have, however, within the last two years, been resumed. There are now eight quarries in work, with several others just about recommencing—all of them are either paying large profits to their respective proprietors, or on the eve of doing so; and it is with the view of conveying to the capitalist and the public the important advantages derivable from this source of investment that we furnish your Journal with this brief description of the wealth of this valuable valley. The veins are two in number, running in nearly an east and west direction, each varying in width from 100 to 300 feet; the north vein is principally composed of blue slate, while the south has that red or pinky blue colour which is so much admired in London.

The first on the north vein is the Cloddiford Quarry, 240 feet deep, from whence have been taken some of the finest slates ever produced in this or any other country; it is somewhat narrow and confined, and at present full of water. The property has, unfortunately, got into Chancery, but we are informed that it will soon be released, and again set to work.

The next is Tal-y-Sarn, an extensive work, conducted for some private individuals, under the able management of Mr. Bonus, a gentleman respected by every one who has the honour of his acquaintance, for his talents as a quarryman and general urbanity of manners.

Higher up the mountain are the extensive quarries of Cilgwyn, from which the largest returns have been made; they were worked for many years by the late Mr. Muskett, but on that gentleman's decease were very much abused, and eventually abandoned. They are now again set to work, on a small scale, by a local company, and so far as the workings have been re-opened are returning a handsome profit. We are repeatedly informed, that the works will in a very short time be carried out to a large extent—negotiations being now in progress for an advance of capital commensurate thereto.

At the foot of these quarries a small quarry, the name of which we have forgotten, has lately been set to work by six working quarrymen; and although they are struggling against the difficulties of want of capital, yet they are saving money, and there is every hope, in a short time, they will be amply rewarded for their exertions.

The Dorothea Quarries are next in the valley, by the side of the Lake, worked by a local company, who commenced with scarcely any capital, but are now beginning to make good profits; they are extending their works, and will, in a short time, have a fine quarry—the only drawback to their more rapid progress is, they are compelled to use steam-power for hauling and pumping.

Above this is the Pen-y-bryn Quarry, in full operation, doing well, and making good profits.

Again, still higher up, is the Pen-orcedd Quarry, from which the proprietors have amassed a little fortune, although commencing with scarcely any capital.

Higher up the mountain are two other quarries, which are said to hold out great promise, but at present in an inefficient state of working. On the opposite side of the Lake are four or five quarries, only three of which are in work—the first is Ty-Maur, which, during the past week, has been purchased by a London Company, who intend to work it on a large scale; we meet their engineer on the works, who was engaged in preparing for the erection of the necessary machinery; from this quarry some of the finest, as well as some of the most extraordinary, slates are obtained—so beautifully and finely laminated in the texture of the working rock, that we saw slates split 20 in. long, thinner than a sixpence, and so tough that they would bend nearly an inch and a half before they broke.

Close adjoining this is a quarry belonging to Mr. Byford, of Liverpool; they have got their deep level driven up, and are getting into good slate—it is a quarry of good promise.

To the west of this is the Tyn-y-Werglodd Quarries, under the management of Mr. Foley, a gentleman well-known to the readers of the Mining Journal. The works are being carried on with spirit; and judging from the appearance of the working rock, which is being opened on extensively, and the beautiful quality of the slates they are shipping off, it holds out a promise of becoming a work of great importance; indeed, we do not see how the quarry can fail, as they have no expensive machinery, nor will require any for many years, with good rock to work on, and plenty of it.

The two other quarries further west are yet idle, being suspended for want of capital.

Nantlle is rich in other things as well as slate; it abounds with copper lodes of a very promising appearance, intersected with cross-courses, and embedded in a stratum congenial for the production of minerals. A small mine has been worked at Tamow by a few miners; the lode was sunk on at the junction of a caunter lode some 6 or 7 fathoms, where a course of ore was found from 3 to 9 inches thick. The adit level is driven up about 40 fathoms, and is intended to communicate with the shaft. No machinery will be required, as there are backs 70 fathoms high above water level. On the adjoining estate a copper mine was worked some few years since by a Liverpool company—it is called Gwernor Mine; the works are now abandoned. About two miles up the valley, and nearer to the foot of Snowdon, are situated the Dwa-y-coed Copper Mines, the returns from which are about 100 tons per month; they are very profitable, as no steam machinery is required; they have been working for above 70 years, and may be said to be only now in an infant state.

In concluding this notice, we have only to remark, that the tourist, geologist, capitalist, merchant, or miner, will be amply repaid the trouble of a visit to this rich locality.

PIONEER.

#### PRACTICAL AND THEORETICAL MINING.

SIR.—I have lately seen a letter to you on this subject in your Journal, written by "A Practical Miner" at Camborne, or at least one who signed himself as such. He very justly asked a question, which has not been hitherto answered by those flying geologists who appear to know the whole working of Nature's laws. The question is this—Have any of their theoretical reports on different subjects proved at all beneficial, either to the practical man or the capitalist? He also very candidly called upon them to point out one single mine where, by their reports, any important discovery had ever been made; and I would beg again to enforce the same question, without the least prejudice on either hand. Mr. Editor, I consider this a subject of deep importance, and I think it would be only just on your part to enforce the question, because capi-

talists who are not acquainted with mining may still be lead astray, knowing not in whom to place confidence. Example, you are aware, is better than precept; and in future, instead of using vague language, let your scientific correspondents prove to the public their ability, by naming wherein their wonderful attainments and reports have been of service; then, of course, capitalists will know in whom to place confidence.—JOHN SPARGO: *Dowgate, Oct. 22.*

#### LEGITIMATE MINING.

SIR.—Much has been said on this subject of late, and no doubt but all who wish mining well will act in a legitimate way to support it. "Common Sense" says it is comprised in this:—"That when a person obtains a sett, he should, previous to bringing it out, ascertain correctly its geological and mineralogical features, the amount of machinery, cost thereof, per centage of ore, calculated produce, expense of dressing, and profits." I admit that all this is very good; but I ask, is it the practice in Tavistock, or in any other district? I admit it is the most legitimate mode of procedure, but can it be expected that those who in general discover setts or lodes can do this of themselves, as the discoveries are generally made by the working miners, and but few of them are prepared to advance 200l., 300l., or 500l., to prove the value of the sett discovered? not but they would gladly devote all they could spare to make the sett appear what they fully believe it to be. I would ask "Common Sense" how a miner should proceed to obtain from 300l. to 500l. to open a sett which is very extensive, at least a mile square, in which there is to be seen a very fine copper lode, and he wishes to ascertain the value of the sett before he attempts to form a company, to carry out the concern with a mining-like spirit? Any information on this subject will be thankfully received through your Journal.

City, Oct. 23.

R. C. M.

#### TICKETING DINNERS.

SIR.—I noticed in your Journal of the 11th inst. a letter upon this subject, coming, as I suspect, from a queer fish near the institution at Redruth, evidently concocted while suffering from bile, after partaking of a "surfeit," as he is pleased to term the repast that follows the copper ore sales. Allow me, as one still further west than him, to state that the remarks you have appended at foot are quite correct, and as every tub should stand upon its own bottom, it may be that hundreds of your readers will be anxious to know what these dinners and charges really consist of? I can supply it from an original document, and, therefore, lay it before you.

You have already stated that the cashier of each company is, by rule, entitled to his and his horse's dinner free. The assayer and sampler divide the fee of 16s. to procure their services elsewhere. Such is the rule established and agreed on. Since then there has been gradual but shameful encroachments made by these smelting companies' agents, as I shall too plainly show; for, instead of the cashier of each company being satisfied with their own and horses' provender, there is scarcely a sale of copper ore without the presence of the assayer and sampler also (and if not them, the clerk, or some in lieu); thus, the parties receiving 16s. to be elsewhere, pocket, and carry away that sum in coin, and partake in the weekly "surfeit," if henceforth it is so to be denominated. Three years ago, thus stood affairs at the copper ore sale that took place at Tyack's Hotel, in this town:—

32 dinners and desert at 4s. 6d.	£7 4 0	Steward's fee for ditto	£1 0 0
12 bottles of port at 5s.	3 12 0	Stationary, pens, ink, &c.	1 8 0
10 bottles of sherry at 6s.	3 10 0	Corn for smelters' horses, &c.	1 5 0
Spirit consumed	3 0 0	Assayers and samplers' (all)	
Ale and porter	1 3 6	allowance in lieu of dinners	6 8 0
Lemon, sugar, and cigars	0 10 0	eight companies at 16s. each	
Servants' attendance	1 1 0	Total	£29 11 6

The average produce at this sale was 7½; the standard, only 88l. 11s. The charge per head for each of the 12 mine agents who dined was 12s. 2d.; the expense charged to the mines being 14d. per ton upon the ore.

In such woful times for the copper miners as on that day, when the average produce was low, and the standard most unprecedentedly so, then would have been the proper time to complain; then ought the excrement to have been cut off, much better than have suffered it to progress onward, and become, as it now is, doubly enormous. The complaints against the system are innumerable; every mine manager and agent murmur amongst themselves. Yet, it seems neither of the gentlemen who preside three weeks out of every four are disposed to take up the cudgels, because (as it is surmised) they consider it is the duty of the gentleman who fills the chair every fourth week, representing 1600 tons of ore each time, to be the prime mover, as he is by far the largest payer, and the mine he represents pays the largest tax towards the support and continuance of such a bad system.

On the above occasion, as stated in the bill, 32 persons sat down to the 4s. 6d. dinner (desert included), consisting of fish, flesh, and fowl; no luxurious made dishes appeared; no tongues tortured into the shape of dolphins or Chinese junk's were there exhibited to please the eye and pall the taste; but a good and substantial spread, and an excellent dessert followed of every sort of ripe fruit in season. The charge for the whole speaks for itself (4s. 6d. per head), leaving no cause for complaint, neither was there room for it as to the quantity of wine and spirit consumed upon the occasion. Out of the 32 persons present 12 only were representatives of the various mines, and the expense of each of them, 12s. 2d. per head, was charged to their respective concerns; the steward made the thirteenth, acting as vice-chairman, leaving 19 persons to be accounted for by the eight copper smelting companies, which, according to rule, ought to have been confined to a representative of each firm; therefore, the mines selling that day paid the smelting agents' fees in money, eight at 16s., 6l. 8s., and the dinners, &c., for 11 persons not entitled to be present, at 12s. 2d. each, is 6l. 13s. 10d.; together, 14l. 1s. 10d., which, with the 4l. 17s. 4d. for the eight cashiers, makes altogether 18l. 19s. 2d. expenses incurred by the smelting companies' agents out of a bill for 29l. 11s. 6d. (saying nought about the horse's charge). Without intending to be invidious, it may be well here to particularise the number of representatives each company had at the dinner. Nos. 1, 2, and 7, three each; Nos. 3, 4, 5, and 8, two each, making 19.

Such is the true statement of one ticketing dinner, and how the bill is divided up and charged. The mine adventurers have just cause to complain: then, why don't they, one and all, unite and do it, rather than keep privately grumbling, and still allow the practice to continue. As to the idea of a "general mart," it is moonshine; they need no better place than the Assembly Room at Truro, the Town Hall at Camborne or Redruth, if they choose to select them, with a cold collation, or something of the sort; but reform the present abuses properly, and the ticketing expenses need never be objected to, or letters written in complaint thereof.—T. T.: *Camborne, Oct. 21.*

#### THE TAMAR SILVER-LEAD MINING COMPANY.

SIR.—The letter of "A Loser," in last Saturday's Journal, tells a sad tale respecting the affairs of this company; yet, I fear, a true one. The mines are prosperous, but the smelting otherwise. What is the cause of this? Other smelting firms do well in a commercial point of view; why not the Tamar concern do so too? Something, I fear, is wrong in the practical management, or whence such losses, independent of the "bad debts"? I am of opinion that the smelting works are necessary to the prosperity of the mine, if properly carried out, as it is a security, in a measure, to the obtaining of fair prices for the ores raised; at least, it keeps up fair and just competition.

Seeing matters standing as they do, I would advise that some sound, practical smelting manager be called in to inspect the works and processes carried on at the spot, and report thereon. Let him see if any well-tried improvement can be introduced with advantage, or if any management expenses can be dispensed with on the establishment, so that benefits may arise instead of losses.

London, Oct. 20.

ANOTHER LOSER.

#### OLD WHEEL SURPRISE.

SIR.—A Mr. Thomas Fuller sought, a week or two since, to impose this mine upon the public, under the name of "Devon Great Burra Burra," in the hope that the similarity of name would secure for it the notice and attention which the Devon Burra Burra has so eminently obtained. Doubtless, many were deceived by this unscrupulous attempt; but I have the satisfaction of knowing that many more were preserved from the consequences by timely warning. Those who do not read your Journal critically would not discover that the various contradictions, which appeared from Mr. E. Hopkins and others, in last week's Journal, of the false statements put forth relative to Wheel Surpri, fraudulently called Devon Great Burra Burra, had no reference whatever to the Devon Burra Burra Mine, of which a second perusal will convince them. I need not further trespass upon your columns in reference to this nefarious transaction. A certain corrective for such proceedings, would be to require that every man before he advertise as a broker should become a sworn broker of the City of London. Character and probity are essential qualifications for the practice of such a profession: the bare requirement of proof of the possession of these pre-requisites would effectually exclude from the mining world those whose characters will not bear the strictest investigation.

London, Oct. 24.

THOMAS HARVEY.

[We have felt called upon to make some slight alterations in the letter of Mr. Harvey—more especially as the strictures omitted have reference to matters which never appeared in our Journal.]

#### SILVER VALLEY AND WHEEL BROTHERS—WHEEL LANGFORD.

SIR.—I have observed from time to time several notices of the large discoveries of silver in the Silver Valley and Wheel Brothers Mine. The success of that adventure is now placed beyond a doubt. I have recently visited Cornwall for the purpose of inspecting that mine, and it appears to me that Wheel Langford, adjoining, deserves the particular attention of those who take an interest in mining speculations. The development of the lode of silver gossan is very extraordinary. It exists in a well-defined and continuous lode, from 3 to 4 in. thick, lying upon a wall of stone, which separates it from the main copper lode, 7 feet thick. These two lodes are at this moment laid open for working no less a distance than 300 fms.; and as a superior engine, by Nicholls

and Williams, has just been put to work, in a short time returns of an important character to its adventurers must be made. I brought specimens of the silver gossan to town, broken promiscuously from the lode, and was astonished to find that, although no appearance of silver was evident to the eye, yet, on assay, it produced 87 per cent. of pure silver. On calling at the office, a day or two ago, I found, that since the engine had unwearied the workings, they had broken and sent up some beautiful specimens of both silver and copper ore from parts of the lode they had not before got at; and I hesitate not to say that nothing could be more satisfactory than they are. The copper lode even at the present shallow depth will yield ore that will command a very remunerative price. Several thousand pounds worth of silver was formerly sold from the shallow workings of this mine, and 20 tons of copper ore, which realised 20l. per ton. The mine has now arrived at a point to fully develop its resources, and will assuredly yield an ample return to those who are fortunate enough to have held to their investments in it.

City, Oct. 24.

A CONSTANT READER.

#### TO THE SHAREHOLDERS OF THE ANNOTTO BAY AND LIGUANEA MINING COMPANIES.

As the recent reports from Jamaica justify sanguine expectations from the operations of these companies, the shareholders should now be firm in retaining their shares, and qualify themselves for the ensuing election in January next.—A SHAREHOLDER: *Barbican, Oct. 24.*

#### MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

DEVON BURRA BURRA.—The workings at this mine are being prosecuted with considerable energy. The Gate-post lode still maintains its size and character, and it is expected that the precise spot from which the rich blocks of the grey oxide of copper were taken will be reached in from 10 to 15 fathoms further driving. The large east and west lode, from which fine specimens of yellow sulphuret of copper were raised, is daily improving. The adit has now been driven a great many fathoms towards the western cross-course, near which, it is expected, the junction of the two southern lodes takes place, where a large deposit of ore is anticipated. The engine-shaft will be sunk at the junction, and at 10 fathoms a level will be driven under the ore ground already passed through. Considerable returns of ore are calculated on from the shallow levels of this highly-mineralized virgin ground.

EAST WHEEL REETH.—At last the long expected lode in this mine has been cut. The unsatisfactory position in which the adventure had been brought when purchased by the present company, and the subsequent delay in the erection of an engine, were serious drawbacks for a length of time to the advancement of the character of the mine; but by the unwearied perseverance of the committee, all difficulties have been surmounted, and it is believed that the results will be quite as favourable as originally anticipated. From the report received from the captain, which will be found in another column, it will be seen that the lode which has been cut is estimated to be worth more than the average of the same lode in Wheel Reeth, which, if correct, stamps it at once as a mine of great promise. Shares are held firmly, but those that have changed hands have fetched a considerably increased price in consequence of this intelligence.

ST. AUSTELL CONSOLS.—This mine, which has lain idle for some time, has again been taken up. There are about 1000 fms. on the course of the lodes; it has three large lodes with two others intersecting them; also there are two large elvan courses running parallel with the three main lodes; one is the Great Polgoth elvan. A discovery was made a fortnight since in the adit level in Stope's lode, which varies from 15 to 40 feet wide. The following day it was visited by a party of gentlemen from London, who were making a tour through the county. Two of the party went underground, and broke down some stones from Stope's lode, containing the grey oxide, yellow sulphuret, and green carbonate of copper, which they carried away with them. Several parties have since visited the sett, which is a very promising piece of ground, and likely to pay the new adventurers a handsome profit.—*Charlestown, Oct. 23.*

WHEEL SAMSON.—The working of this mine appears to be progressing satisfactorily. The drivings are being continued upon the east and west branch towards the junction. The lode in the present end is above 5 ft. in width, and consists of a grey flookan, containing silver, or of mundic containing sulphur, silver, white iron, &c.—all of which is calculated to be saleable at a sum exceeding the cost of its return; so that the mine might be considered to be repaying the expenses of her preliminary operations.

CWMYDYL ROCK AND GREEN LAKE COPPER MINING COMPANY.—The extent of ground to be worked by the above company covers an area five miles in length by three in width, contiguous to the sea, in the parish of Beddgelert, in the county of Carnarvon. From the prospectus, we find that this is the same ground formerly worked by the Snowdon Mining Company; but, from the want of sufficient capital for the erecting smelting and refining houses, &c., on the estate, labouring under unskilful and inexperienced management, paying extravagant tribute to the miners, with enormous cost for the transit of ores, for smelting and refining, operations ceased, and the mine came into the hands of the present trustees. It appears that, during the past eight years, with a view to carry out the workings on an extended scale, a large capital has been expended in making roads, erecting a crushing mill of great power, miners' cottages, smiths' shops, and purchasing miners' implements. The capital in the present company is 30,000l. in 10,000 shares, 6000 to bear interest at 6l. per cent. on 2l. per share, and 4000 to take the dividend on 1l. per share. One good feature in this undertaking is the fact that the former adventurers prefer to exchange their scrip certificates in the Snowdon for those in the Cwmtyl, instead of being paid off. The shares are said to be all subscribed for, and the company about to commence operations on an extensive scale, as soon as smelting and refining houses are erected, which will be commenced immediately. The ores already taken out from the several levels produce, on analysis, from 15 to 60 per cent. for copper. The Green Lake, a large piece of water, takes its name from its colour, being strongly impregnated with sulphates and carbonates of copper; it is about 100 ft. deep, the lode passing across it. A large body of ore is likely to be found, returning handsomely to the shareholders. Upon the whole, the mine appears to possess great mineral capabilities, and, from the height of the mountain, 3500 ft. above the level of the sea, can be worked without expensive machinery.

WEST WHEEL GRENVILLE.—This mine, now being worked on the Cost-book System, in 6000 shares, situate in the parish of Crowan, is 600 fathoms on the run of the lodes, and about the same in breadth. There are six or eight lodes in the sett, and are undoubtedly the same as traverse West Wheel Bailer, South Basset, South Wheel Frances, and a portion of North Basset, being immediately west of this remarkable cluster of rich mines. The ores raised from the lodes are black and grey copper, and rich tin. The shafts are in good condition, buildings in good repair, a new 40-in. cylinder being erected, and all necessary machinery for forking the water will be ready in two months. Capt. Johnson Vivian, who was formerly agent when the mine was worked, states that below the 42 fathom level there was a course of rich ore when the mine stopped; and the drawing up the machinery created much surprise, as it required but 4 fms. to reach another level, where it is anticipated by all experienced miners rich deposits exist. The present proprietors are now willing to dispose of the public 3000 of the shares, at 1l. each; and for further particulars we refer to our advertising columns.

WHEEL EDWARD is situate in the parish of Calstock, Cornwall, held under a lease, from the Duchy of Cornwall, for 21 years. It is surrounded by some of the most productive mines in the Tavistock district, being in the immediate vicinity of Devon Great Consols, Bedford United, and other promising mines. Bounded on the north by the Drake Walls (tin); on the south by Wheel Calstock (copper); on the west by Calstock United (tin and copper); on the east by Wheel Arthur (copper), the lodes of which traverse this promising sett the whole of its distance east and west. They have at last succeeded in discovering (and are working on) what is termed the Wheel Arthur north lode (that from which all the ore is risen in Wheel Arthur). A splendid lode, about 6 ft. wide, composed of beautiful gossan, spar, &c.; the spar being intermixed with spots of rich yellow ore and mundic, at the shallow depth of 6 ft.; several experienced mining agents pronounced it to be one of the finest looking lodes in the district, as seen in the back. It is also confidently believed that it will return copper ore, in large quantities, at a comparatively shallow level. Wheel Arthur, in deep adit, is within 60 fms. of the eastern boundary of Wheel Edward sett; which adit would, if driven, drain it to a depth of from 60 to 70 fathoms; this would, of course, be a great advantage to have a mine unwearied to that level. The Tamar silver lead lodes also traverse this sett, from which, at a depth of from 7 to 10 ft., stones of lead of high produce have been taken. Altogether, it is one of the most promising speculations a capitalist could invest in, from having so many splendid lodes traversing it.

CONDURROW MINE.—(From a Correspondent).—Great dissatisfaction was expressed by several influential shareholders present at the account meeting, on Monday last, that the pursuer should, without solicitation, declare a dividend, which was most unexpected on the part of the adventurers, who were quite content to wait for one until the next bi-monthly meeting. The pursuer, however, backed by his proxies from Yeovil, and the merchant adventurers, persisted in his point, assumed assets that were not realised, and withheld payments to his merchant friends, in order to carry his point, and, accordingly, the dividends were remitted the first post without the usual statement of accounts, which proceeding is as unsatisfactory as the other. Ill-natured parties might conjecture from this that certain folk intended the unexpected dividend to raise the price of shares in the market for the purpose of effecting sales; but without meaning this, the step taken certainly carries an appearance of irregularity, and is not as it should be.



## BRITISH MINES.

This vein is now closed in with the north vein, and, most probably, will at a short depth form one large lode, about 14 feet wide. The course of ore on this vein, reported in August, appears to go down, and to the west, but in much diminished bulk, worth now from 10 to 15 cwt. per fm. As this lode becomes more settled in the depth, I more confidently rely upon finding it rich at the point where the north cross-cut will cut it.

**LEAD-ORE CONCENTRATES.**—At West Hill, the lead-ore concentrates are found in a gossan shaft; is large, and being composed of quartz, mundie, and spots of lead ore, is very kindly. For a considerable length throughout the adit level drilvage the lode is full of lead-ore, and is very rich. The lode is from 1 to 2 ft. wide, and in places has produced some good lead ore: although at so shallow a depth from the surface. I consider the indications of more than ordinary character, and, in my

**SOUTH TRELAVANT.**—The cross-cut was made in the afternoon—ground much the same as last reported; it is extended about 13 fms. Our progress on the eastern part of the boundary is slow. We have intersected some hard floors of chert, and the water is much quicker than it has been.











At Merilyn Mine, the engine-house is completing with all possible speed, and the prospects are very encouraging as the lodes open deeper.

At the South of Scotland Mine the machinery has effectively drained the mine to bottom, so as to enable them to sink the south shaft.

At Wheal St. Agnes they are raising some very rich work for tin near the cross-course upon Gripe's lode. All the lodes in that district usually prove productive at a short distance from the various cross-roads, consequently the adventurers have every reason to believe that on opening more ground on the lodes they will, at an early day, receive ample remuneration for their outlay.

At Bodmin Consols a call of 11 per share has been made.

At North Basset Mine, the lode in the 82 fm. level west, for the last 15 fathoms driving, has yielded copper ore equal to 401 per fm.; the level over, for 12 fms., has been equal to 304 per fm.; the pitches in the backs are looking exceedingly well, and producing the best ores, one of them as low as 1s. 6d. in 17. The 62 fm. level has been extended the furthest west by at least 12 fms., and the appearances in the end are such as to induce them to believe they have another course of ore ahead. The 52 is passing through disordered ground. They have ready for sale 183 tons of copper ore, estimated worth 1200l. The discoveries during the last two months have considerably exceeded the quantity of ore raised to the surface; the available ore ground is monthly increasing. Altogether, the underground prospects were never more flattering than at present.

At Caradon Wood, the water-wheel will be ready to work at the end of next week. The surface operations are nearly completed, and the sinking of the engine-shaft will be resumed with vigour. This mine is held in high estimation by the practical men of the district.

At Bishopstowe Silver-Lead Mine, it will be seen by the explanatory report of Capt. Matthew Francis that the cost of driving levels is almost unprecedentedly low; the progress is, therefore, rapidly made, which is a great advantage in mining pursuits. In the 20, great expectations are formed of the lode proving productive within six months. The limestone seems to contain rich bodies or bunches of ore, similar to the Flintshire and other carboniferous beds. They have lately found some good lead in the 32 fm. level, in a lode 3 ft. wide.

At Great Bryn Consols, the ground in the deep adit level has improved in softness; the ground requires some timbering. A cross-course had been driven north 55 fms. The shallow adit had been opened, driven in former workings 159 fms. An old level had been also opened in Little Bryn, adjoining the mine, in which it is reported two lodes had formerly been known to exist.

At Bryntal Mine meeting, on the 16th inst., the accounts showed a balance in favour of the mine, 110l. 8s. 4d.

At Cefn Bruno the lode in the 24 west is 3 ft. wide, yielding 3 tons of lead ore per fathom; the adit west 1 ton per fathom. The western shaft is now in course of sinking.

At Wheal Fanny they have a lode full 12 ft. wide, the ore part about 3 ft., with good lead ore. The new water-wheel will be in operation in two or three weeks. The recent discovery here is causing some excitement.

At Lydford Consols, the water at Wheal Adventure is forked 9 fathoms under the 12 fathom level. The Fanny lode has been driven upon about 7 fms., presenting a very flattering appearance—the flookan part spotted with lead ore of good quality, similar to that at Wheal Fanny.

At West Wheal Rose, operations have commenced, showing a spirited intention on the part of the shareholders. The ground has proved harder than expected. The lodes seen in the adit level promise well; we would, therefore, advise the party to sink their shaft with all expedition, and drive the cross-cuts, so as to lay open the ground as fast as possible in the deeper levels.

The Llwynmales Mining Company have entrusted the future management to Messrs. John Taylor and Sons, and made a call of 1s. per share, for the purpose of clearing off some liabilities. At present, operations at the mine are suspended, but expected to be speedily resumed.

Messrs. Arthur Dean and Adam Murray have recently inspected West Polgoth Mine, and by their reports (which are among our Mining Correspondence) it appears the lodes all underlay north of east, two of them about 6 ft. in a fathom, and the middle one about 13 ft.; their direction nearly north-west. An adit, 17 fms. deep, has been driven on these lodes. The engine-shaft is sunk 12 fms. below the adit, and sinking deeper, in fair killas ground, at 51 per fm., the water being drawn by a disc engine 35 in. in diameter, the lift consisting of pumps 9 in. bore. The tin lode in the bottom is 1 ft. wide, capable of yielding 27 sacks per fm. In the cross-cut south, in the adit level, a well-defined tin lode was cut, 4 ft. wide, close under a decomposed elvan course; it does not appear to have been wrought below this level. Stamping machinery is likely to be required, and for some time to come might be advantageously employed by connecting the same to the engine already at work. The report from the agent, subsequently received, fully confirms these remarks.

At East Wheal Russell, the lode in the Tunnel level has greatly improved; in the rise in the back of the level the ore part of the lode is 20 inches wide, containing very rich ore—some of the stones of ore broken weighing 122 lbs. The lode in the end is 6 ft. wide.

Considerable business has been done in Wheal Lovell shares, and at moderate prices in reference to their value. The dividend is 8s. per share per annum; and they write as follows from the mine:—"You may depend that, when we have had a few more dividends, these shares must look up, as they are in most respectable hands. The mine is looking well, and the tin trade is in a better state than it has been for years."

At Blwch Consols they are breaking about 80 tons of silver-lead ore monthly. They are at present returning about 45 tons monthly, and have sampled that quantity for the present month, the remainder being left as reserves in the mine.

At Allt-y-Crib they are breaking about 40 tons of ore monthly; and the western part of the mine, called Llwyn Adde, is now opening good tribute ground.

At Court Grange they have sampled 30 tons of ore from Penycyf, and 3 tons at Llettyben, the proceeds of which are expected to be 450l. to 500l. The ore ground in these mines is extending.

At Daren they have sampled 20 tons of rich copper ore, and have 10 tons of lead ore broken on the bank.

At Cwm Daren they have sampled 10 tons of lead ore and 10 tons of copper ore. The 10 fm. level is opening ground worth 15l. per fm.

At Cae-Gynon they have sold about 10 tons to Messrs. Sims, Williams, and Co., at 9l. 14s. per ton.

At Grogwinion they have sampled 10 tons of rich ore, and have now drained the old works under the long drift, where they expect to raise good quantities of ore shortly.

At Penrhif, since they have had water, they have cleaned about 6 tons, and will sample 10 tons next week; but as the operations at present are very limited, the returns will be small.

At Wheal Guskis they have a fine course of tin in the 10 fm. level; it is about 1 ft. wide, and nothing better is supposed to have been seen for some years. It has created much interest in the neighbourhood, and hundreds of people have been looking at the stuff drawing. On Martin's lode also they are breaking some good grey ore.

During the week shares have changed hands in Alfred Consols, Bedford United, South Tamar, Merilyn, Wheal Trewane, Trelawny, West Providence, Tremayne, Butterdon, Cwm-dyle, Rock, Mary Ann, Treleigh, East Russell, East Boringdon, North Downs, Great Alfred, East Wheal George, Wheal Venton, Lamon, Crebor, Wheal Golden, Wheal Arthur, Trenault, West Callington, West Wheal Rose, North Trelawny, Pennant, Craignew, Tavy Consols, Trevillian, Black Craig, Boringdon Park, Caradon Wood, Wheal Williams, Franco, Mary Emma, Peter Tavy and Mary Tavy, Wheal Samson, West Downs, Garra, Great Wheal Marthia, Daren, Great Bryn Consols, Allt-y-Crib, Wheal Brewer, West Damsel, and Mining Company of Ireland.

In Foreign Mines, the transactions have been in Australian, Copiapo, St. John del Rey, Cobra, Santiago, and United Mexican.

From the Alten Mines advices have been received to the 26th Sept., the produce being 194 tons of ore per assay, yielding 976 tons of fine copper. The workings in Raipas are unusually poor, and the returns very trifling; the only explorations now making are to get under the run of ore ground south-east. At Labouchere's the prospects are encouraging. The lode had just been intersected in the United Mines, not cut through, but what they could see of it contained some good ore, and looking promising. At Woodfall's, the tributaries in the backs are meeting with success, and the prospects in the Old Mine are encouraging. The north-east stope is yielding from 5 to 6 tons per fm. The stopes from the shaft are yielding 4 tons of ore per fm., but more mangle in it than usual. The Llwynmales Mining Company has received advices to the 11th instant. The shaftmen and others were busily engaged completing the change of pitwork. The eastern stope in the 55 was worth 3 tons per fm.; the 45,

east of Shaw's, 2 tons. The ground, in several instances, is becoming harder to explore. Lead ore weighed in, 57 tons 10 cwt.; total in stock, 208 tons 16 cwt. Pig-lead smelted, 25 tons: total in stock, 472 tons.

The United Mexican Mining Association are in receipt of a letter from the Foreign-office, stating that Lord Palmerston has received the assurance through Mr. Doyle, her Majesty's Chargé d'Affaires, that the Mexican Commission would speedily meet to decide on the mode of payment of the company's large claim on the Government, amounting to \$350,000, or (say) 80,000l. In the present state of the company's affairs, the receipt of this large sum would prevent the necessity of any fresh calls being made upon the shareholders for the purpose of giving the mines a fair trial. The following statement shows the present financial position:—

Debt due from Rayas	\$300,000
Debt from Mexican Government	350,000
Quicksilver stores and other property	400,000
Assets in London	55,000
<b>Total</b>	<b>\$1,050,000</b>

or, in sterling, about 221,000l.—say, equivalent to 5l. per share. It is to be hoped that the embarrassments of the Mexican treaty will not cause an indefinite postponement of the settlement of the company's claims, incontestable as they are.

From the Copiapo Mines advices are to 24th August (the agent's report will be found in another column). Owing to a scarcity of native labourers, through sickness and death, the produce of copper for July was only 41 tons; the epidemic, however, seems to have terminated. The accounts from the silver mines are not quite so favourable as were expected; the arrival of a party of young Cornish miners would soon enable the manager to prosecute certain points, which at present are all but suspended.

From the Royal Santiago, advices are to the 24th Sept., the expected returns for which month are only 80 tons of ore. In the winze below the 15 lode is 5 ft. wide, yielding 5 tons of excellent ore per fathom; it has been holed to the 22 fm. level about 9 fms. west of Taylor's shaft, and they are stopping the lode east and west of the winze. The 22 west is turning out about 3 tons of ore per fm. Taylor's shaft will now be resumed sinking; the water is quick, the mules are obliged to be driven hard to keep it 15 feet below the 22 fm. level. Thompson's engine-shaft is sinking by day, likewise the Ysabelita shaft. If progress in these can be made without hindrance, better accounts may shortly be expected.

The Australian Mining Company has received advices to the 24th of June. The agent says—"The mine continues as last reported by Capt. Phillips [not yet to hand]. The stamps are working most excellently. Nothing shall induce me to check the workings, which are more satisfactorily in all parts, and mostly providing material for the stampers. I have great satisfaction in being able to report that I have arranged to sell our stamped ores to the Yatala Company."

The Worthing Mining Company have received advices which state, that at the water-shaft the lode had produced stones containing good quality copper ore, composed of (at 30 fathoms deep) copper, mangle, spar, and flookan. At the Gully end south, they had cut into a lode 13 feet wide. It is composed of spar stained with iron, containing minute particles of copper and mangle and stones tinged green. The character of the country, adjoining the west wall, is killas with reddish-coloured veins running through it. The agent, Capt. John Richards, recommended sinking a new shaft further east, when the present one would be serviceable for air and as a whim-shaft. The engine would be delayed a few days through the illness of one of the smiths. The Middle Gully south had been driven 78 fathoms under gossan, which presented a uniform appearance, with stones and specks of copper and mangle.

The Annotto Bay Mining Company have received advices from their agents at Jamaica to the 26th September, stating that at the Abbey Green Mine the workings had been extended, and large masses of fine quality copper ore extracted, weighing from 2 to 3 cwt. in a stone, and that a shipment of the ore would soon be made.

The excitement arising from the highly-favourable accounts which have, for some time past, been received from California, appears to be on the increase. Numerous small local partnership adventures are said to be progressing most satisfactorily, while the returns of the original Mariposa Company appear to be immense: several companies are actively organising here, and at Paris one has just been formed, under the title of the Nouveau Monde, with shares all paid up. From the latest accounts new discoveries of rich auriferous quartz were being made; and yesterday, we understand, two samples were assayed by Messrs. Johnson and Co., of Hatton-garden—one giving a value of 13,400l., and the other 24,500l. per ton, though, by the naked eye, scarcely any gold can be seen.

Letters from Montreal, in confirmation of previous accounts, state that the auriferous regions to the south of Quebec, on the waters of the Etchemin and Chaudière, yield a moderate quantity of gold. There are two or three companies working in different sections, and they pay their expenses; beyond that they cannot boast of much success. The auriferous district extends into the north-westerly portion of the state of Maine, and according to the report of Mr. Logan, the provincial geologist, it includes a section of the eastern township.

An interesting communication, from our intelligent correspondent at Adelaide, will be found in another column. By the courtesy of our friend, we are enabled to periodically present a faithful review of mining progress in the colony, on which the utmost reliance can be placed. We are also similarly situated with regard to Spain, one of our earliest contributors having signified his intention of communicating all matters of interest from thence; and we need hardly add, that we shall esteem very highly such authenticated details as we may receive from California, and other parts, where mining industry prevails. At Lake Superior, we unfortunately lost a very able correspondent in the late Capt. Oliver Mathews; doubtless, among the numerous body of intelligent gentlemen engaged in that district, we shall not be long without a successor to our friend.

The West India Mail arrived on Thursday: the freight included—Gold in bars, value \$371,050; gold dust, \$51,022; gold coin, \$12,170; silver bars, \$462,021; silver in dollars, \$375,614; platina, \$2000; platina pins, \$8240; silver ore, \$1280; precious stones, \$32,690; the total amounting to \$1,316,097, or 263,219l. sterling: besides miscellaneous cargo, valued at the sum of 25,743l.

A considerable business has been done during the week in Bank shares. London and Westminster shares are attracting a good deal of attention, and, on the whole, the price is well supported. Union of Australia and Union of London are very firm. The sales of the week are as follows:—Australia (40l. paid), 37 3/4 ex div.; London Joint-Stock (10l. paid), 18 1/2; London and Westminster (30l. paid), 29 1/2 ex div.; Oriental Bank Corporation (25l. paid), 26 1/2; South Australia (25l. paid), 25 1/2; Union of Australia (25l. paid), 35 1/2; Union of London (10l. paid), 15 1/2.

In Dock shares there is not much movement, but prices are well supported, and London stock has risen 1/2. Commercial stock is quoted 84; East and West India, 142 1/2; London, 114 1/2; St. Katherine, 79; Southampton, 17 1/2.

In steam-boat shares there is little doing. Prices stand as follows:—General Steam Navigation, 27 ex div.; Peninsular and Oriental Steam, 67; ditto new (10l. paid), 15 1/2; Royal Mail Steam, 79, 80.

Miscellaneous shares are quoted as follows in the official list:—Assam Tea Company, 9; Australian Agricultural, 15; Australian Trust, 20 1/2; Anglo-Mexican Mint, 23 1/2; Canada Company, 47 1/2; Hudson's Bay Stock, 20 1/2; Price's Patent Candle Company, 23 1/2 ex div.; South Australia, 25 1/2; Van Diemen's Land, 1.

#### ACCIDENTS.

Callington Mines.—About 1 cwt. of powder had been used for blasting a hole, when, after waiting about an hour for the foul air to escape, William Ever descended the shaft, the air of which was so bad that he is supposed to have been rendered insensible, in which state he fell from the kibble, and was killed. Another man, Samuel Daniels, then descended by the ladders, and, not returning, a third party descended, and found Daniels setting down on one of the spokes of the ladders, quite dead. Both men have left large families to lament their untimely end.

St. Erth.—A man named Birch fell down the shaft at Wheal Squire, and was killed.

Greenup.—John Oates was killed by falling from the 194 to the 208 fathom level, at the United Mines.

Waterhampton.—T. Colley had his back bone and several ribs broken by a fall of roof at Messrs. Dixon and Hill's colliery: the poor fellow lies in a hopeless state.

Sedgley.—At Mr. B. Gibbons's Deepdale Colliery, T. Oakley, aged 13 years, foolishly held on to a skip while ascending, and, when near the top, loosed his hold, when he fell to the bottom, and was killed.

Sheffield.—C. Butcher was killed by a fall of roof at Messrs. Stevenson's and Co.'s colliery, at Lockwood.

Holywell.—J. Balla fell down the shaft at the Halkin Mine, and was killed.

Eccleston.—J. Gregson was killed by an explosion of fire-damp in Messrs. Bromilow's Royal Colliery.

St. Helen's.—T. McGuire fell out of the bucket at the Laffack colliery, and was killed.

Sunderland.—W. Brown was killed in Sherburn-house pit by an extensive fall of roof.

Tredgar.—Two miners, Lewis and James, were seriously injured by an explosion at the New Darren Coal-Works.

#### BLACK TIN.

Mines.	Tons.	Price.	Purchasers.
Mill Pool	1 13 1/2	412 15 0	Bolton & Sons.
ditto	0 16 1/2	42 15 0	ditto
ditto	0 11 1/2	42 15 0	ditto
Folberou	20 0 0	43 17 0	Calcutt & Co., Williams.
ditto	2 10 0	43 17 0	ditto
ditto	0 15 0	40 10 0	ditto

#### LEAD ORES.

Sold at Aberystwyth, on the 20th October.

Mines.	Tons.	Price per Ton.	Purchasers.
Fromgoch	80	£10 8 6	Sims & Co.
Cwmystwith	50	10 7 6	ditto
Nantco	45	9 8 6	ditto
<b>Total tons, 175</b>	<b>Amount of money, £1776 17s. 6d.</b>		

Ticketings at the King's Head Hotel, Holywell, on the 23rd October.	Tons.	Price per Ton.	Purchasers.
Pant-y-mwyn	15	£9 16 0	Walker, Parker, & Co.
Pen-y-henblas	15	9 16 0	Newton, Keates, & Co.
Westminster	52	10 7 0	J. P. Eytton.
ditto	52	10 7 0	Walker, Parker, & Co.
ditto	26	10 7 6	ditto
Jamaica	26	10 7 6	Mather & Co.
Maesgwyn	70	10 6 0	Newton, Keates, & Co.
ditto	4	13 10 0	Walker, Parker, & Co.
Milver	23	11 6 6	J. P. Eytton.
Pant-y-frith	14	10 15 6	Walker, Parker, & Co.
East Shallow	33	14 14 0	Walker, Parker, & Co.
West Shallow	10	13 1 1	ditto
Garmadyn	38	9 15 0	ditto
Nickson	5	12 0 0	ditto

Herodfoot	Tons.	Price.	Purchasers.
50	£11 4 0		Sims & Co.

Keawick	Tons.	Price.	Purchasers.
30	£9 5 3		Richardson & Co.

Tamar Silver-lead	Tons.	Price.	Purchasers.
49	£18 12 6		Locke, Blackett, & Co.

East Wheel Rose	Tons.	Price.	Purchasers.
45	£12 6 0		Sims & Co.

ditto	Tons.	Price.	Purchasers.
25	12 2 6		T. Somers.

#### COPPER ORES.

Sampled October 1, and Sold at Swansea, October 21, 1851.

Mines.	Tons.	Prod.	Price.	Mines.	Tons.	Prod.	Price.
Berehaven	194	91	7 15 6	Knockmahon	57	81	£6 12 6
ditto	110	104	7 15 6	ditto	52	81	6 12 6
ditto	104	10	7 11 6	Burra Burra	50	37	31 0 6
ditto	102	104	7 16 6	ditto	48	38	31 0 6
ditto	102	104	7 19 0	ditto	46	38	31 0 6
ditto	73	104	7 18 0	ditto	39	30	32 5 6
ditto	14	91	7 11 0	Dudley Slag	43	34	2 4 0
Cobro	101	161	13 0 6	ditto	31	25	1 18 0
ditto	101	17	13 0 6	ditto	27	24	3 17 6
ditto	91	161	12 15 0	New Zealand	30	11	9 10 0
ditto	60	24	19 10 6	ditto	13	14	11 0 0
ditto	51	24	19 10 6	Caldbeck	8	25	20 1 0
ditto	48	24	19 10 6	ditto	1	23	19 1 0
Knockmahon	44	84	6 9 0	Bathurst	2	104	7 15 0
ditto	74	84	6 10 6				

#### TOTAL PRODUCE.

Berehaven	607	£4723 14 0	Dudley Slag	137	£331 6 6
Cobro	456	6980 12 0	New Zealand	43	428 0 0
Knockmahon	267	1749 12 6	Caldbeck	9	179 9 0
Burra Burra	187	5887 1 6	Bathurst	2	15 10 0

COMPANIES BY WHOM THE ORES WERE PURCHASED.	Tons.	Amount.
English Copper Company	424	£4558 1 6
Freeman and Co.	119	804 8 0
Paces Grenfell and Sons	215	1712 15 0
Sims, Williams, & Co.	153	2118 3 0
Vivian and Sons	253	3730 5 0
Williams, Foster, and Co.	175	1757 2 0
Mines Royal	152	2336 15 6
Schneider and Co.	86	2337 6 0
Low's Patent Copper Company	109	724 19 6
F. Bankart	2	15 10 0
<b>Total</b>	<b>1708</b>	<b>£20,295 6 6</b>

#### AVERAGES.

Produce.	Price.	Standard.
British	£6 10 0	£101 2 0
Foreign	19 7 0	89 12 0
<b>Sale</b>	<b>15</b>	<b>£11 17 6</b>
<b>Totals—British 1020; Foreign, 688 = 1708 tons (21-cwts.)</b>		<b>£93 16 0</b>

#### AVERAGES OF LAST SALE.

Produce.	Price.	Standard.
British	£6 11 6	£99 3 6
Foreign	18 12 6	85 6 6
<b>Sale</b>	<b>20 5 16</b>	<b>£15 7 6</b>
<b>Totals—British, 548; Foreign, 1494 = 2042 tons (21 cwts.)</b>		

#### COPPER ORES.

Sampled October 8, and Sold at Andrew's Hotel, Redruth, October 23.

Mines.	Tons.	Price.	Mines.	Tons.	Price.
Devon Gt. Cons.	101	£8 6 6	Wheal Caradon	50	£10 0 6
Wh. Josiah	100	7 4 6	ditto	47	4 5 0
ditto	85	8 7 6	ditto	39	10 2 6
ditto	83	4 3 0	ditto	32	6 8 0
ditto	81	8 4 6	Marke Valley	102	3 16 0
ditto	76	4 5 0	ditto	27	4 6 6
ditto	74	5 11 6	ditto	24	8 16 0
ditto	61	7 2 0	ditto	18	3 0 0
ditto	58	7 0 0	Wheal Friendship	107	6 19



## NOTICES TO CORRESPONDENTS.

- "G. T." (Tyndrum).—The firm of J. and A. W. White, Glasgow, are large manufacturers of chromate of potash, and purchasers of both Norwegian and American chromate of iron. Information, as to its market value, could be obtained from them.
- THE GENERAL MINING COMPANY FOR IRELAND.—Sir: "Midas" is not the only one that has cause to complain of the difficulty of getting information respecting this exclusive concern. Though a small proprietor from its formation, and honoured twice a year with permission to attend its august meetings, and, of course, participating in its 20 per cent. dividends—which, by-the-by, from what I hear of its capabilities should be nearer to 300 per cent.—I am unable to procure the slightest possible particulars respecting its proceedings. Surely, Sir, where such apparent success attends their operations, the directors can have no real cause to keep such invaluable secrecy. Why not publish, say a monthly report, in your Journal, for general information?—A. SHANKS, holders: Oct. 22.
- "C. P. C." is informed that the best cobalt ore found in Cornwall, in anything like marketable quantity, was at Wheal Sparrow and Corners-stone Mine, Redruth, about 34 years ago.
- EAST COASTDALE MINE.—In our Journal of the 11th inst., instead of the bearing of the shaft being 30 inches, read degrees; the 72 in. level, say 12; and in the last line but one, shaft should be left.
- MINING APPOINTMENTS.—Several mines having altered the days on which they hold their account meetings, as also their pay days, our correspondents will oblige us at all times by communicating such alterations, so that our list may be as accurate as possible.
- DEAKES FOR UNDERGROUND INCLINES.—Sir: If "An Enquirer" (in last week's Journal) will forward me the angle of his incline, I will furnish him with either a drawing or model of a small apparatus, which I have reason to believe will answer his purpose.—R. J. H.: Sunderland, Oct. 20.—[A letter addressed to "R. J. H.," forwarded to our office, will reach him.]
- "A Shareholder" (Cheapside) had far better attend the next meeting, and bring the subject before the proprietors: the publication of his letter would cause much ill-feeling and dissatisfaction—which, perhaps, enquiry and explanation may in a great measure prevent.
- SIR.—Will you oblige by stating the mining law of the following case?—A. READES: Oct. 23.—A, the owner of a mine, sells a certain number of shares to B, who pays to A the money for the shares, and takes a receipt for it; but A neglects to make any entry of the sale in the books of the mine, and B, when he has an opportunity of selling, cannot, because he can give no transfer, nor proof of holding. How, in such a case, can B compel the entry and registration of his shares, in order that he may sell?—[We think there can be no difficulty in the matter: if B took a receipt of A on paying the money, he has a proof of legal holding, and, on application to the Stannary Court, he could be compelled to make good the transfer. The Vice-Warden has lately shown a determination to compel transfers to be completed by pursers in a reasonable time, or punish them for the neglect. How was it if B did not see to the transfer or entry, and accept in the usual way at the time? If the mine is not in Cornwall, it is, of course, a case for the courts of common law.]
- PROVIDENT CLERKS' ASSOCIATION.—We omitted, in our article in last week's Journal, an important point—viz.: that clerks, being members, in case of permanent calamity or distress, are eligible to an annuity themselves of from 25s. to 35s., and their widows, afterwards, to the annuity (we referred to) of 15s. to 25s. per annum, according to length of membership of the husbands.
- "C." (Suffolk-street) is informed that the shares named were sold at 1s. 10s., as stated by the brokers who supplied us with the information, during the week ending the 4th inst. We never traffic in shares ourselves, and are, therefore, dependent on others for the list of prices, as we are also for the amount of calls made in the various mines. He had better apply at the office, in Adam's-court, Broad-street.
- AQUA FRIA GOLD MINING COMPANY.—Sir: In the prospectus issued by this company, they state they have obtained a lease from Messrs. Palmer and Cook, of San Francisco, of certain gold districts in California. I do not wish to throw cold water on any project; but it is announced that one of these gentlemen is believed to be the Mr. Palmer, who, as engineer-in-chief of the Anglo-Californian Company, obtained a lease for that company, and then kept it for himself. I make no further remarks; but, being anxious to embark in an apparently desirable undertaking, and deterred from so doing by the assurance of the fact being as here stated, as also being referred for corroboration to the offices at Albion Chambers, Adelphi, I think it only fair that the parties concerned should have an opportunity of setting the matter right on a point calculated to throw, at least, discredit on their proceedings.—E. W. B.: City, Oct. 25.—[I enclose you my card, in proof of sincerity.]
- \* \* We must impress upon our correspondents, the necessity of invariably furnishing us with their names and addresses—not that their communications should, consequently, be noticed, but as an earnest to us of their good faith.

## The Theory of Mineral Veins.

BY EVAN HOPKINS, ESQ., C.E., F.O.S.

We have pleasure in announcing, that the chapter on this important subject, as newly written for the second edition of Mr. Hopkins's work on "Terrestrial Magnetism," will appear, as a series of papers, in THE MINING JOURNAL, with the necessary illustrations.

## The Cost-Book System.

Having repeated applications for particulars respecting the Cost-book System, we have reprinted, as a pamphlet, the paper descriptive of its principles and practice, which appeared in the Mining Journal. Copies can be procured through any bookseller or newsman, or at our office, price 6d.

\* \* It is particularly requested that all communications may be addressed—  
TO THE EDITOR,  
Mining Journal Office,  
26, FLEET-STREET, LONDON.

And Post-office orders made payable to Wm. Salmon Mansell, acting for the proprietors.

THE MINING JOURNAL.  
Railway and Commercial Gazette.

LONDON, OCTOBER 25, 1851.

The MINING JOURNAL is published at about Eleven o'clock on Saturday morning, at the office, 26, Fleet-street, and can be obtained, before Twelve, of all news agents, at the Royal Exchange, and other parts of London.

The importance of a strict and efficient supervision of the working of our collieries has never been more clearly demonstrated than on Monday last, at the Wakefield Court House, when Messrs. STANFIELD and Co., of Flockton, preferred a charge against HENRY HOBSON, a miner in their employ, for obstructing an air-gate in a coal pit in which he worked,—an account of which will be found in another column. It appears from the evidence that the offender, who had been of weak intellect from his childhood, finding the workings cold, had fixed two turn boards and laid his clothes on the top, which had the effect of stopping the air of the pit. The enquiry took place in the presence of Mr. C. MORRIS, the Government Inspector, who had examined the pit and plan, and considered the lives of all were in danger during every moment the obstruction continued. The coal is what is called the Cromwell bed, which is so fiery that the men employed in getting it are obliged to work with safety lamps; this gentleman further says, "If the stoppage had been allowed to remain two or three hours, I consider that, under certain states of the atmosphere, it might have caused an explosion, sufficient perhaps to occasion the death of all who were in the pit. If violation of rules of this kind are allowed to common colliers, the results must be disastrous, for an explosion might occur five minutes after such a stoppage. In a coal mine there are a hundred contingencies from inflammable gas to be apprehended, if the supply of air be cut off."

No expressions can be more forcible than these, and it proves the conviction which we have always expressed, that the mine Act for the inspection of mines and collieries was most inefficient, and not calculated to deal effectually with the ill which it professed to remedy. In the case before us, here was a man of weak intellect, and ignorant withal, in a position by which, through his folly, the lives of some score of his fellow-creatures were jeopardised. What is required, in addition to the usual supervision, is that certain fixed rules, according to the locality and circumstances, should be laid down for the governance of both the overlookers and the workmen, and these in no case departed from; an efficient superintendence would always be able to modify them, so as to be effectual at all times and seasons. The absence of some such code was fearfully felt, on Saturday last, at Messrs. BALDWIN's colliery, near Pot House Bridge, Bilston. It would seem that the engine belonging to the pit is used for the double purpose of pumping and winding. At night it was customary to throw out of gear the winding apparatus, in order to let the pumps work without interruption. On the evening previous to the accident, the bands had been thrown out of gear as usual. In the morning, the night engineer, finding the water out, stopped the engine, and threw the bands in gear, as he thought, ready for operation upon the arrival of the day engineer. On lowering the skip, in which there were seven men and six boys, they began to descend with such fearful velocity, that it was evident the engine was out of gear. The unfortunate individuals were precipitated a depth of 120 yards, the band chain became detached, from the sudden jerk at the extreme end, from the engine shaft, and the chain, of about two tons weight, fell to the bottom, and buried the sufferers in its iron coils. Two of the boys were dead, and the remainder most seriously mutilated. The coroner's jury returned a verdict of "Manslaughter" against JONES, the engineer. This man probably will be tried and punished. We would not wish here to say what the extent of his punishment may be, nor would we interfere with the verdict of the jury. He, as well as the unfortunate

victims who have suffered from his negligence, or ignorance—for we will not say culpability—are but the victims of an ill-ordered system, its only merit being that of singular inefficiency for all good purposes.

We are under the painful necessity of recording these melancholy accidents frequently; scarce a week passes but some fresh calamity has to be registered, and we trust that those members in the Legislature representing the mining and colliery districts will direct their attention to the amendment of an enactment which, though well intended, has proved, from its working, nugatory. What is required is not to know the cause of evils after they have occurred, but their prevention.

In the MINING JOURNAL, of the 28th of June last, we noticed the passing of the Act of Parliament, 14 and 15 Vic., chap. 94, for the "Modification, definition, and amendment of the Mineral Customs of certain parts of High Peak, in the county of Derby, part of the possessions of HER MAJESTY'S Duchy of Lancaster; to make provision for the better administration of justice in the Barmote Courts therein; and to improve the practice and proceedings in such Courts." We then gave a general outline of the enactments it contained; but having before us a treatise on the Act,\* analytically and practically arranged, containing valuable and interesting matter on the duties of the King's-field, and the practice and proceedings of the Barmote Courts, we now proceed to take a somewhat more comprehensive view of the subject. THOMAS TAPPING, Esq., Barrister-at-Law, of the Middle Temple, is the author, a communication from whom appeared in the MINING JOURNAL of the 11th inst., stating some of the imperfections of the Act; these appear not to meet the approbation of a correspondent of last week, under the signature of "A. P.," stating himself to be the owner of mineral property in the Peak. In another column will be found a reply from Mr. TAPPING; and as his explanation is, we think, fully borne out by the contents of the work and ancient customs of the district, we now proceed to give a running commentary from the work, that our readers may judge for themselves. We will first premise that, although the Act is called the "High Peak Mineral Customs and Mineral Courts Act," yet it embraces a great part of the mining district of the Wapentake of Wirksworth; for the whole of the "King's-field" being within the Act, that part of it which is within the Wapentake must also be comprehended; the title is not, therefore, sufficiently comprehensive. Although the preamble states that it was passed to settle the territorial jurisdiction of the Barmote Courts, it creates greater doubts than before existed, and well justifies the statements made at the numerous meetings at Wirksworth, that the Act is inefficient. The other objections which "A. P." has attempted to confute, will be found well explained in the author's communication in another column.

We now proceed to the volume under notice. The author commences by stating his opinion that, when attentively considered, the Act is the most important, having relation to mines and minerals, that has for some years received the sanction of the Legislature, and far more comprehensive in its provisions, and simple in its conciseness, than the Forest of Dean or Stannary Acts, and eulogises the intentions of Government as evincing a wish fully to develop the vast mineral wealth of the United Kingdom, which far exceeds that of any other European state, and furnishes four-ninths of the raw mineral produce of all Europe, the annual value being 24,000,000l. sterling. The practical value of the Act will be speedily tested, as the first Great Barmote Court, to be held under its provisions, was held on the first Tuesday in the present month.

With respect to the great antiquity of mining operations in Derbyshire, it is stated that the whole mineral district has been immemorially governed by certain ancient laws, customs, and duties, the origin and commencement of which are of such high antiquity as to have baffled the researches of the most diligent enquirer. Historians seem, however, to be perfectly agreed that beyond all doubt the Romans, and probably the Britons, worked the lead mines of Derbyshire; the former having been governed by a code of mineral laws, not much unlike those which were in operation before the passing of the present Act. The laws were both civil and criminal, on which the author says—

Doubtless the civil part of the code fully and satisfactorily met the wants of the miners, as the provisions, although singular and unique, are yet reasonable. Our wonder, however, is strongly excited by a perusal of the criminal branch of the code, the punishments contained in which are singularly sanguinary and penal. How they could have been found by the jury, or have received the sanction either of the Royal Commissioners or of the Crown, all of the present age must be at a loss to conceive; yet these laws were not only tolerated but enforced in England during nearly four centuries, and so late as the year 1658. The instance which it is proposed to cite of the brutality of their criminal punishments, is that which was consequent upon the third attempt of stealing from the lead mines; it was, that the culprit be taken and stricken through the right hand in the palm with a knife up to the hilt into the "stew" (wood work of the mine), and there he be compelled to stand till he died, or else cut himself loose. In the latter case he was compelled to forfeit the franchise of the mine. Pilkington's version of the punishment is inaccurate; it is, however, this, that the hand of the criminal was nailed to a table, and in that state he was left without meat or drink, having no means for freedom, but by employing one hand to cut off the other.

It appears certain that for many years previous to the passing of the Act, the mineral laws and customs of the King's-field had, through neglect and disuse, become uncertain and undefined, and were also in many respects altogether inapplicable to the scientific mode of mining operations which had been brought into use. It, therefore, became necessary that a corresponding change in the law should be made, and this led to the passing of the Act. A schedule of the 28 articles and customs established by the Act is given; and while the author allows every merit to Government for a desire to promote the best interests of the district, he clearly points out in annotations and cited cases where the Act is defective, and suggests the best mode of alteration and improvement. In the second chapter of the volume, the author treats on the remaining portions of the Act, which make provision for the better administration of justice in the Barmote Courts, and improvement in the practice and proceedings therein; and in an appendix an entire copy of the Act is given, with the schedules, forms of notices, &c., tables of fees, and a copious index. To all persons interested in the mining laws of Derbyshire, and in the progress of its mineral development, we confidently recommend this treatise as most lucidly explanatory of the Act in question.

It has of late grown too much the fashion with some sections of the daily press to reproach the metropolitan Government of the colonies with being the active cause of whatever distracts the peace, or checks the progress of society, in those distant and almost independent districts. The newspapers on this side the sea are as pat at laying the Kaffir war and the Australian league, now looming up in the southern horizon, to the charge of the COLONIAL SECRETARY, as if that distinguished nobleman had laid the train and applied the match, in both these instances, with his own hands. But the cool truth is, notwithstanding the heat of their contrary affirmation, that neither Lord GREY, nor any of the gentlemen in his department of the administration, have had any more to do with the origin of the war in the one case, or of the league in the other, than Tenterden steeple had to do with the formation of the Godwin Sands. The original causes of the Kaffir outbreak, and of the federal league in the Australian, were laid before Lord GREY came into power, or had seen the inside of the Colonial-office. This imputation of blame to the home Government comes with the least possible grace from those who, in the early part of the present Kaffir contest, accused the colonists of the Cape with having done what they could to make a conflict with the savages near them as probable a contingency as possible. In order, it was said, that they might, as in the preceding war, enrich themselves with the expenditure of money drawn from the Imperial Exchequer.

We never concurred in that imputation; and it is now laid aside by those who gave it currency, and in its place something which the Government has done, or which it has not done—for it is no matter whether they assign a positive or a negative cause of the war, so as it is thrust in at the doors of the office in Downing-street—is made the occasion of the contest which unhappily prevails. In the same way as to the Australian league, by which it is sought to control the acts of the Imperial Legislature and Government, and to give the colonists of that hemisphere a practical independence before they have procured it, either by arms, treaty, or purchase. This new agitation is set down to the inefficiency of the measure of last year, which was hailed by all parties, both in and out of Parliament, as a concession liberal up to the point of an enlarged generosity, but now reckoned a stepping-stone to, and justification of, the additional claims set

\* "A Treatise on the High Peak Mineral Customs and Mineral Courts Act, 1851 (14 and 15 Vic., chap. 94), analytically and practically arranged." By THOMAS TAPPING, Esq., barrister-at-law, Middle Temple.

up by the Australian Chambers. This change and flutter of the colonial vanes, and the corresponding variation in the views of those who wait upon them, would, if as all initiated by those who are at the helm of colonial affairs, bring in that prevalent anarchy which is a thousand times more injurious than those occasional misconceptions and miscalculations which are wont to mark the course of the most prudent and the most painstaking administrative ability. We are certainly sensible of something like admiration at the coolness of those who so sharply criticise the conduct of Government in great things, and yet are so encompassed with errors themselves in affairs infinitely less. Their steadiness of feature is wonderful; their stiffness of face is marvellous. For our own parts, instead of expecting that in a chain of dependencies so vast, so distant, and, in some instances, so uncivilised, the surface of society should be permanently unruffled and undisturbed, we ought rather to lay our account for those interruptions to social peace and to political unity, which in states whose organisation is far more perfect and profound than that of the colonies, will, whatever be the amount of human vigilance, occasionally mar our prospects and multiply our repressive duties.

Referring to our remarks in the Journal of the 6th September, on the subject of "kitting," it is with regret that we have to report another case of a similar nature in the same locality, the pursuer in both mines being Mr. MICHAEL MORCOM, showing, however, the folk of St. Agnes may be taunted as "totals," that some of their labourers are as cunning rogues as can be found elsewhere. At the Cornwall Michaelmas Sessions, JOHN PROUT, of St. Agnes, was charged with feloniously taking and removing tin ore from Polberron new adventure mine in that parish, the property of MICHAEL MORCOM, and others, the adventurers. Mr. H. S. STOKES conducted the prosecution, Mr. HOCKIN the defence. The prisoner was indicted under the Act 2d and 3d Victoria, passed for the prevention of "kitting;" he had been for some time employed there as a tributer. In September last he and pare rose a quantity of tin ore, and sent it up to surface for dressing; it was divided into two piles, the best being by itself, as usual. On the 13th of that month samples were taken in the ordinary way in presence of the prisoner, and sent into the sampling-house upon the mine, and close to the tin floors; it had two rooms one above the other, the under one being used for the purpose of assaying or testing by fire the quality of the ore, the place being carefully locked up, and the keys kept in the account-house. The captain, suspecting some fraud had been committed, determined to watch by night, one in each of the rooms; they accordingly went there and saw everything in perfect order, prisoner's samples included, upon which they placed a piece of heath, as they had before done on the Saturday night, and found it had been removed on their return on Monday morning, and the sample prilled, evidently showing some one had been in the room in the interim. On Monday night, about 11 o'clock, the two captains sitting concealed in the assay room, saw some one come towards the window and look in, who then tried the door, went round the house and opened the other door, from whence was a stairway up to the room over; up he went, and proceeded to the barrow where the samples were. Hearing the iron lid of a barrow lifted, the captains separated, the one to the lower door, the other to the higher one of the sampling-house, thinking to catch the culprit as he made his exit from either. Hearing one of the doors opened, they retreated a few steps, when two men rushed out, one from each door, and made their escape; the one from the upper room Capt. HANCOCK declared to be JOHN PROUT, and Capt. MARTIN was near enough to identify him; the former gave chase, but not succeeding in overtaking him, proceeded to his dwelling—he was not there. Capt. HANCOCK, on his way back towards the mine, heard two men conversing, and being certain PROUT was one of them took him into custody, and gave him in charge to a constable. The prilled sample would increase the prisoner's gettings from 3l. to 6l. per month. Prisoner declared his innocence, that he had not been near the spot, and was then coming from TOM TREGELLAS's public-house. The captains then proceeded to the sampling-house, found the barrows removed, and on the floor close by prisoner's sample there was a small bag containing some stones of rich tin ore, evidently prepared for prilling. One of the pare decamped that night, and had not been met with since, supposed to be the companion PROUT had with him in the house; this, with other circumstantial and strong corroborative evidence, was the case as against the prisoner.

The defence mainly consisted of evidence that both the captains, shortly after this occurred, had made statements contrary to their present evidence, and an *alibi*. W. NICHOLLS and JOHN BENNETT, (tributers, swore that they heard Capt. HANCOCK say the next day he could not exactly swear to PROUT, and when he took him in the lane he was in a very different kind of dress. HENRY ROUSE swore, that Capt. MARTIN told him on the Saturday following that one man bolted through the window, and that he did not see enough to enable him to swear it was PROUT. (Capt. MARTIN emphatically denied saying any such thing, or mentioning about the window). W. PARNELL, the constable who took charge of PROUT, asked HANCOCK whether he was sure PROUT was the man he gave chase to, and that HANCOCK's words were, "I believe so." HENRY HUDDY, a shoemaker, swore that he saw PROUT enter TOM TREGELLAS's public-house as the clock struck eleven, and about half an hour afterwards met him and JOHN DANIEL; all remained together till midnight, when they went to DANIEL's house to get supper. JOHN DANIEL confirmed this, and that it was beyond half-past twelve when PROUT quitted. The jury consulted together for above five minutes, and returned a verdict of acquittal.

The jury gave the prisoner, as in duty bound, the advantage of any and every reasonable doubt, and thus the case terminated; but this ought to prove a caution to evildoers in similar instances: for had the captains been as firm in their evidence to the point, and caught the culprits inside the house, as they ought, and might have done, the guilty parties would have been brought to justice, and suffered the severest penalties of the law. We cannot fancy how, when once they had the two rogues in the trap, they had not given alarm, and thus prevented their escape. They have this once done so, the next time they may not prove so successful.

SHARE DEALING.—(From a Correspondent).—At the Redruth Conny Court an action was brought by Thomas Tyacke, tinsman and mine broker, of Camborne, against Mr. J. R. PIKE, a shareholder of Redruth, for recovery of 11l., alleged damages sustained by non-transfer of a share in East Tywarthayle Mine, while it bore a premium; but now being worthless, the action was brought for recovery of the purchase money. The plaintiff appears to be everlastingly in this court; his happiness, indeed, seems to consist in litigation; he has not only employed all the legal talent that attends it, but conducted innumerable cases, from briefs prepared by himself, to the amusement of all present, and this against ill-success—for in eight cases out of ten he has been on the losing side. He seems, however, determined to persevere, though it must cost him more tin than all the "pots, kettles, and pans," in his shop. In the present instance, upon presenting Mr. PIKE's transfer to the pursuer for registration, owing to some irregularity, it was returned for correction prior to being duly registered. Seeing Mr. PIKE shortly after this, he mentioned the circumstance, when Mr. PIKE said, "You'll find it all right now,"—meaning, that if it presented it would be registered by the pursuer. Tyacke replied, "Very well"—but cunningly kept the transfer by him, to see (as it was inferred) which way the price of shares were likely to go—up or down: as, in case of the latter and a call, they standing in PIKE's name, he would be called on and not himself—this actually occurred. Finding the shares had at length become valueless, he attempts to repudiate the contract, and sue for recovery of the purchase money. His Honour read a wholesome lecture into the ears of the tinsman, to a similar effect as the Vice-Warden in his decrees, *Nicholls v. Stevens* (see Mining Journal, Aug. 30), he "could not countenance such chicanery as leaving the shares unregistered for so long a time, and then attempting to rescind the contract on their lessening in value, which was literally speculating in another man's property; the verdict must, therefore, be given for defendant."

BESSEMER'S IRIDATING MACHINERY.—A trial has been made at Liverpool with one of Bessemer's patent draining and irrigating machines, which has been manufactured by Messrs. G. Forrester and Co. The machine is of about 14-horse power, and is placed in an iron boat or punt, 36 ft. long and 9 ft. beam, drawing, when in working order, 2 ft. 6 in., and discharging with ease at the rate of 3 tons of water per minute to an elevation of 26 ft. above the surface of the canal. The water was measured during the experiment by being discharged into a large wooden box, containing exactly 6 tons weight, and the average time of filling it was 40 seconds. We understand the same parties are manufacturing three other draining machines, two of them 40-horse power each.



## MINING ENTERPRISE—ITS PROGRESS AND PROSPECTS.

Continuing to solicit from our readers, connected with tin and lead mining, particulars of their monthly sales, in order that our quarterly account may be furnished in a more correct and satisfactory manner than hitherto, we now proceed with those mines whose sales of tin were particularised in the Journal of 4th inst.

Lewis Mines, tin and copper, at St. Erth, stands there as selling 12407. 11s. 3d., tin; whereas, their actual sales for the quarter were, 42497. 11s. 6d.—namely:

Union Smelting Company	.....	Tons	60	19	2	14	.....	£2952	16	6
Williams, Harvey, & Co.	.....		18	6	2	9	.....	1296	13	0
Total tons	.....		79	6	0	23	.....	£4249	11	6

and copper ore weighing 18 tons, at 67. 14s. 6d. = 1217. 1s.; altogether enabling the directors to declare dividends, to the end of Aug. last, of 27 per share—the outlay having been 174. each—the mine 100 fms. deep.

Until the latter part of the 17th century all the Cornish tin was smelted in blast furnaces with charcoal; the decrease of wood in the county increasing the expense of charcoal naturally induced the smelters to adopt any substitute: they then adopted pit coal, which caused the erection of air reverberatory furnaces, in which the fuel and ore were separated, and culm coal mixed as a flux with the ore. The air furnace for smelting tin was erected about 1680; since which period nearly all the tin has been thus smelted in such furnaces. The year 1837, proving a peculiarly unprofitable one, the actual state of the tin mines was then ascertained for the information of Government, upon an application from the miners for the abolition of the duty of 4s. per 120 lbs. to the duke of Cornwall. The result was:—

Loss on 58 mines.....	£111,517	0	0
Less estimated increase in value of property in mines..	£281,000		
Profit on 40 mines .....	20,388	51,388	0
Net loss .....	£60,159	0	0

Tincroft Mine comes next in order, and which was once so celebrated for the large quantity of tin it produced; it has during the last quarter sold 66 tons, value 2742. 6s. 2d.; and in the same period it has advanced its yield of copper ore to 2041 tons, at 47. 6s. per ton = 8783. 15s. 6d. The quality also has improved from 37. 11s. 6d. per ton, the preceding quarter. Highburrow tin lode, in the engine-shaft, is sinking below the 152 fm. level, worth 307. per fm.; the 152 east, 97.; the level above, 157. per fm. The other levels and lodes are looking very well, and are likely to make as much profit as in the quarter just past.

Georgia Consols, situate in the parish of Towednack, St. Ives, comes next in rotation, having sold during the quarter, 23 tons 10 cwt. 3 qrs. 23 lbs., for 1767. 7s. 6d.; if a greater quantity, it was by private contract, of which we are not informed. These mines commenced operations in Feb., 1850, when they erected a new 28-inch cylinder steam-engine, sunk a new engine-shaft 13 fms. under adit, and by Christmas following those levels were exploring the lodes at that depth, upon Cole's and Lane's lodes, and cross-cutting to intersect others north and south. The concern adjoins the Great Wheal Reeth, Reeth Consols, and Wheal Margaret, the lodes of which have invariably yielded large quantities of tin ore. The concern is divided into 2500 shares, of 2l. 10s. each; but as they have taken no steps to supply us with the particulars of the progress making, we have only these scanty items to offer.

Yeoland Consols Tin Mine, near Plymouth, sold, during the last quarter, 6 tons 10 cwt. of tin ore, for 327. 17s. 6d.; the sets are very extensive, being a mile on the run of the lodes, which are both tin and copper. The information we derive from thence is so meagre, that we have nothing further to report as regards this adventure.

Boscean Mine (St. Just) disposed of 5 tons 17 cwt. 3 qrs. in the last quarter, amounting to 3057. 16s. 1d. This concern is in 240 shares, held principally by parties resident in the west of England, and may almost be called a private company. At all events, like many other of the tin mines in that neighbourhood, the parties interested prefer keeping all the information to themselves, rather than forward it occasionally to us for publication and circulation around the world, which might tend to some good, and, at all events, could prove of no injury to any one.

[To be continued in next week's Mining Journal.]

**GOLD MINING.**—We have examined with much pleasure some important improvements in the mechanical and chemical treatment of the gold quartz and debris, invented by Mr. Andrew Smith, C.E., which will effect a considerable saving of expense in the treatment, while a great deal more gold will be extracted. Such an invention must be very important for the mining operations in California and Australia, as it is well known by the gold miners, mineralogists, and assayers, that much of the gold at present remains unextracted. As soon as the patents are secured, we are promised that we shall be enabled to publish the particulars.

**CALIFORNIA.**—The accounts from the mines generally continue to be very satisfactory. One vein in Mariposa, worked by a steam machine, was realising \$800 to \$1500 daily. A company of four men, working a quartz mine at Mount Ophir, were taking out an average \$3000 a fortnight; and the Canon Creek Mining Company were realising upwards of \$5000 per day. As the attention of miners has recently been turned almost entirely to machinery, the probability is that the product will largely increase. The construction of machinery for crushing the rock by water-power will enable the miners to work in sections, which have hitherto been neglected. It is estimated that the shipments from San Francisco, from the 1st of Sept., will average \$5,000,000 per month. The Quartzberg companies in Mariposa are now in the full tide of successful operation. The Washington vein, worked by the Texas and Georgia Mining Company with new and expensive machinery, has scarcely as yet had a fair trial. The rock in this vein is filled with crystallised quartz, the gold in which, although scarcely perceptible to the naked eye, will yield from 12 to 25 cents, per lb. The Spring vein is located about half a mile from the above, where 60 Mexicans are now at work. A blast which has been recently put into the rock, brought to light rich deposits of the precious ore. The other principle veins in this vicinity are the Eureka, Dorra's Mount Ophir, and Gaine's. The latter is exceedingly rich. Four men have taken out as high as \$3000 in a fortnight. The rock throughout this vein is impregnated with fine gold. The veins in the valley are generally owned by companies of from 12 to 25 persons all of whom are endeavouring to procure additional machinery for carrying on their operations.

**AUSTRALIAN GOLD MINES.**—As the advantages and disadvantages of the two systems of government existing in California and Australia, so far as working the gold mines are concerned, have been the subject of some discussion, the following provisional regulations, under which licenses are granted for the purpose of gold digging, by the Colonial Secretary at Sydney, will be found of interest to our readers:—

**LICENSES TO DIG AND SEARCH FOR GOLD.**—Colonial Secretary's office, Sydney, May 23. With reference to the proclamation issued on the 23d May inst., declaring the rights of the Crown in relation to gold found in its natural place of deposit within the territory of New South Wales, His Excellency the Governor, with the advice of the Executive Council, has been pleased to establish the following provisional regulations, under which licenses may be obtained to dig, search for, and remove the same:—

1. From and after the 1st June, 1851, no person will be permitted to dig, search for, or remove, gold on or from any land, whether public or private, without first taking out and paying for a license in the form annexed.
2. For the present, and pending further proof of the extent of the gold field, the license fee has been fixed at 12. 10s. per month, to be paid in advance; but it is to be understood that the rate is subject to future adjustment, as circumstances may render expedient.
3. The license can be obtained on the spot from the commissioner, who has been appointed by His Excellency the Governor to carry these regulations into effect, and who is authorised to receive the fee payable thereon.
4. No person will be eligible to obtain a license, or the renewal of a license, unless he shall produce a certificate of discharge from his last service, or prove to the satisfaction of the commissioner that he is not a person improperly absent from his hired service.
5. Rules adjusting the extent and position of land to be covered by each license, and for the prevention of confusion and the interference of one license with another, will be the subject of early regulations.
6. With reference to lands alienated by the Crown in fee simple, the commissioners will not be authorised for the present to issue licenses under these regulations to any person but the proprietors, or persons authorised by them in writing to apply for the same.

By His Excellency's command, E. DEAS THOMSON.  
**FORM REFERRED TO—GOLD LICENSE.**—No. —. The bearer, —, having paid to me the sum of £1 10s. on account of the territorial revenue, I hereby license him to dig, search for, and remove, gold on or from any such Crown land within the county of Bathurst as I shall assign to him for that purpose, during the month of —, 1851. This license must be produced whenever demanded by me, or any other person setting under the authority of the Government. (Signed) A. B., Commissioner.

**SAFETY APPARATUS, FOR PRESERVING LIVES AT SEA.**—Mr. John Keyes, the inventor of the apparatus, previously described in our Journal for the preservation of life and property at sea, made a most successful experiment in the River Thames on Wednesday. Mr. Keyes fully demonstrated the practicability of stemming the tide and crossing the current, thereby providing for vessels in danger the means of reaching the shore; at once removing all necessity of life-boats, or other apparatus, and attendant risks.

## Original Correspondence.

## MINING IN DERBYSHIRE—THE HIGH PEAK ACT.

SIR,—I beg, through you, to thank your correspondent, "A. P." for the very courteous manner in which he receives and deals with my objections to the High Peak Act (14 and 15 Vic., c. 94); and I trust that he will, in the same good spirit, accept the following replies to his observations.

1. "A. P." has failed to convince me that no part of the Wapentake of Wirksworth is included in the Act, or that such Act is confined to a district entirely within the Hundred of High Peak; and that there does not exist in the same Wapentake the inconvenience of two valid sets of mining customs. My argument is this:—first, the King's-field (or, as the High Peak Act should have called it, the Queen's-field; see *Duc. Lanc.*, vol. cxxxix., Nos. 28, 57, in 40 Eliz.) comprehends nearly all the Wapentake of Wirksworth and a considerable portion of the Hundred of High Peak; in other words, the King's-field runs into, and forms part of both the Wapentake and of the Hundred (see Pilkington's and Lyson's *Histories of Derbyshire*); and, secondly, the Wapentake is governed by similar, though not the same mining customs as the High Peak (see Manlove, Pettus, Rod. Reg., Houghton, &c.). Now the Act under comment (14 and 15 Vic., c. 94), by sect. 16, enacts, "That the jurisdiction of the said Great and Small Barmote Courts, and of this Act, shall be held to extend over the whole of the before-mentioned district, called the King's-field, and also over all the parts of the Hundred of High Peak, &c." Thus, as the King's-field forms part of the Wapentake, and is also within the Act 14 and 15 Vic. c. 94, so such Act must have jurisdiction over part of the Wapentake. Also, as the Wapentake was, before the passing of the Act, 14 and 15 Vic., c. 94, governed by certain mining customs, and as such Act provided a set of different mining customs for part only (King's-field) of the Wapentake, so since the Act there must exist in the same Wapentake the inconvenience of two valid sets of mining customs.

"A. P." will, no doubt, seek to, and can alone, argue that the words "before-mentioned districts, called the King's-field," embraces only so much of the King's-field as is within the Hundred; if so, how does he support it? Certainly not by any reference to the preamble of the Act; but should he, it does not help him.

2. "A. P." admits that the Act does not state either the quantity or quality of the estate of the Derbyshire miner in his mine. I appeal to common sense, whether this is or not a blot. "A. P." however says, "it depends upon the grant, conveyance, or will, under which he takes; it may be in fee simple, in tail, for life, or for a term of years." This is no answer at all, nor does it in any way concern the question. If a person, justified by his estate in the land, opens a mine therein, he does not require the protection of a Derbyshire custom, neither does he need the assistance of the Act, nor the good offices of a barmaster; and why? because he has the same estate in his mine as he has in his land. Also, why does the 19th art. declare the mine forfeited if unwrought? Does a purchaser or tenant in fee simple, fee tail, &c., lose his estate if he fail to work his mines? Certainly not. The Act affords many other arguments (see arts. 9, 20, &c.) to show that the Derbyshire miner has no descendible or certain estate in his mine, but has only a mere right to mine.

"A. P." also says that "there is no more necessity for stating the nature of the estate (even if it had been practicable) than there would be for stating what estate landowners shall have in their land." As I have before stated, the rights of the mere Derbyshire miner and a landowner are different, and for the most part antagonistic, so that there is no analogy between their estates, even if reasoning by analogy were sound. The best apology for the omission, for such it undoubtedly is, is that stated by "A. P."—viz. "that it was not practicable"—that is, consistently with the interests of the landowners, to state either the quantity or quality of the miner's estate, and, therefore, it has been omitted. I, however, remind "A. P." that in the Wapentake the miner's estate is certain, and is thus stated by Manlove:—

"And he (by custom) that his mine doth free,  
 A good estate thereby doth gain in fee."

3. "A. P." says that "mines being real estate, the widow is, both by custom and the common law, entitled to dower. I waive all objection to the correctness of this proposition, and am content to take it as the foundation of my argument. If, however, 'A. P.' by the above quotation, assumes that the widow of a Derbyshire miner has a right to dower in her late husband's mere right to mine in the soil of another, I deny the soundness of the assumption. That mines are real estate, I believe no one doubts, but that a mere right to mine in the soil of another (which is all the Derbyshire miner has under the 14 and 15 Vic., c. 94) is real estate I deny emphatically. "A. P." also states that, by custom and the common law, a widow is entitled to dower. Granted as a general proposition; but to confer dower at common law, the deceased husband must have died seized of an estate of inheritance. As, however, the 14 and 15 Vic., c. 94, does not give him any such estate, so his widow cannot claim dower at common law. Again, in order to confer dower by virtue of custom, the existence of such custom must be shown. As, however, such a custom is not shown by the 14 and 15 Vic., c. 94, so the widow cannot claim customary dower under that Act; besides, if before the passing of such Act such a widow had, by custom, a right to dower, that Act has most certainly deprived her of it by abolishing the custom; for section 16 declares that the mineral laws and customs of the whole of the therein above-mentioned district, called the King's-field, &c., shall, from and after Aug. 7, 1851, be such as are mentioned and comprised in the first schedule of the Act, and that no other alleged custom or practice shall prevail.

"A. P." further states "they are included in the Act 3 and 4 Wm. IV., c. 105, under the head 'Hereditament.'" Now, although mines may be admitted to be within the legal definition of that word, yet it must be recollected that the Derbyshire miner has not a descendible estate in his mine, but merely, as before stated, a right to mine, such as a tenant for life has in open mines, whose widow, "A. P." will admit, has no right to dower.

"A. P." further says—"It was not intended by the Act to deprive the widow of her right to dower, and, therefore, it would have been improper specially to mention it." Why, then, I ask, were all the pre-existing customs, dower being amongst them, abolished by section 16, as before stated? In a word, the whole of my third objection is, that as the Derbyshire miner, under statute 14 and 15 Vic., c. 94, has but a mere right to mine in the soil of another (it is a mere right, existing only so long as it is exercised conformably with the customs contained in the 14 and 15 Vic., c. 94), so dower, if it were intended to give it, should have been vouchsafed to the widow by such Act. Manlove, in his quaint poem on the "Wapentake Customs," specially mentions customary dower thus:—

"And he (by custom) that his mine doth free,  
 A good estate thereby doth gain in fee;  
 And if he die, and leave behind a wife,  
 The custom doth endow her for her life."

4. Tithes should have found a place among the customs contained in the Act 14th and 15th Vic., c. 94. From the end of the 17th century, disputes concerning tithes have been a stumbling block to the Derbyshire miner, and although there may not now be, as there formerly was, the same ground for complaint, yet care should have been taken not to have omitted the statement of any duty to which the miner is liable. No one, I believe, who has impartially consulted the voluminous records upon the subject, can doubt that at one time the church had no right to tithe from the Derbyshire miner, and that, unfortunately, payments, both of ore and money, either gratuitously presented to the church by the miner, or extorted from him in return for masses and prayers, were, by long continuance, construed into tithe, or compositions in lieu thereof, which were afterwards enforced by the courts of law, and ultimately sanctioned by the Legislature.

5. I cannot admit that misdemeanors committed in mines are most properly dealt with by magistrates, and the ordinary tribunals of the country; on the contrary, I think they should have been made subject to the jurisdiction of the Barmote Courts. At all events, our forefathers so thought, and many are the instances of customs and laws, both in the Wapentake and Hundred, relating to the exercise of jurisdiction over felonies committed in mines. Thus see 16 Edw., 1 art. 11, Pettus, Rod. Reg., 85, 87, &c., as to the Peak; also Manlove, in describing the jurisdiction of the Great Barmote Court for the Wapentake, says—l. 115, 118:—

"To punish misers that transgress the law,  
 To curb offenders, and to keep in awe  
 Such as be covetous, or do rob men's coes,  
 Such as be pilferers, or do steal men's stows."

Also in Arkwright's c. Cantrill, 7 A and E., 565, Add. M.S., 1782—1835 (British Museum), collected by Adam Wolley, and a work called *The Complete Mineral Laws of Derbyshire*, p. 15, 18, 39, &c., many instances will be found of similar customs. I do not, as will be seen by the

above references, refer or allude to articles mistaken by me for customs but amongst others to the customs as found by the inquiries made in pursuance of the commission issued by Edward I., which are the most ancient written customs that the Derbyshire miner can boast of.

6. As this objection is involved in the first, I refer to the observations I have made *supra* upon this point.

7. "A. P." admits that the Act does not require the steward to be sworn, and says that such a course is consistent with precedent; that there is no instance of a steward having been sworn, nor of any form of oath to be administered to him. My position is that the 14 and 15 Vic., c. 94, should have created the precedent, and that a form of oath should have been provided by it. "A. P." should recollect that by the 14 and 15 Vic., c. 94, the office of steward is for the first time instituted by the Legislature as independent of, and separate from, that of head barmaster. Formerly, as "A. P." is doubtless aware, the steward was a person skilled in the laws of the land and mineral customs of Derbyshire, called in at pleasure by the farmers of the duties, merely to assist the head barmaster in the trial of weighty causes; and that in process of time the assumed office of steward usurped that of barmaster in so many respects, especially in the trial of causes; that the office of steward ultimately became in public opinion superior to that of barmaster (Add. M.S., 6681, p. 390). I assert, therefore, that it was a great omission not to provide for the swearing in of the chief legal judge and officer of the Barmote Courts. I challenge "A. P." to cite a similar instance of a judge not being sworn to do his duty. In conclusion, I have merely to state that the steward ought to be sworn, his duties being—

To hold and preside at the great and small Barmote Courts, of which he is the judge.

To administer oaths to the barmaster, &c.

To attend and preside at views.

To fine and inflict penalties.

To return writs of *certiorari*.

To direct juries, to keep verdicts, and generally to do and execute the principal judicial and ministerial matters authorised by the statute 14 and 15 Vic., cap. 94.

Having, as I conceive I have, fully substantiated my seven positions, there remains but to make some few observations upon the concluding paragraphs of "A. P.'s" letter. I reiterate that there are, as stated in my letter, many "other very serious omissions from, and defects in, the Act," many of which are mentioned in my Treatise. My object, however, in producing that work was not to cavil at, or to pull the Act to pieces; on the contrary, I confess myself to be the miners' friend, and have, from the period at which my attention was first drawn to the Derbyshire mining customs, which was long previously to the passing of that Act, uniformly been actuated by a sincere desire to see them restored agreeably with modern notions, and the scientific mode of mining now adopted in Derbyshire. Therefore it is that, in the first and last pages of the preface to my work, in which it is usually supposed an author speaks apart from his subject, I have commenced and finished with an eulogy upon both the Act and its framers; also, throughout the work, I have never failed to commend those of its provisions which I thought deserved it.

The statements that "several meetings have been already held in the High Peak upon this subject," and that "the Act is not considered efficient," will be found in the *Mining Journal* of Saturday, 4th Oct., p. 479, and did not emanate in the first instance from me.

I beg to remind "A. P." that my letter does not contain either of the phrases, "extraordinary omissions and defects," or, that the Act is "woefully deficient." Notwithstanding, I will not pledge myself to revert again to this subject; yet, I shall always be ready, as far as in my power lies, to promote and advance the interests of the Derbyshire miners, and also, with my best endeavours, support the Act, in the obtaining of which from the Legislature I consider they have been most fortunate.

Inner Temple-lane, Temple, October 21.

THOMAS TAPPING.

## ORIGIN OF MAKING IRON WITH PIT-COAL.

SIR,—I have recently been presented with a curious little work, entitled "*Dud Dudley's Metallum Martis: or, Iron made with Pit-Coal, Sea-Coal, &c., and with the same fuel to melt and fine imperfect metals, and refine perfect metals.*" It has been reprinted by some person at West Bromwich, March, 1851, whose initials are given as "J. N. B.," why he has withheld his name, and also the name of some bookseller of whom the work may be had, I cannot imagine, since there is nothing in it to cause discredit, but, on the contrary, much that the ironmasters of the present day will find both useful and amusing. The publisher (J. N. B.) says: "The reader is informed that this work is an exact reprint, and that obvious errors in spelling as well as grammar have been literally followed." He then goes on to say: "The *Metallum Martis*, printed in the year 1665, of which the following pages are a faithful reprint, became so scarce, in a few years, that very few copies of it could be met with. The publisher having been fortunate enough to obtain a copy, through the kindness of a friend, was so interested in its perusal, giving, as it does, a full account of the state of the iron trade at the time it was written, and also showing the great difficulties which had to be surmounted before coal could be applied to the purposes of smelting and manufacturing iron, that he was induced to republish it, especially as a wish had been expressed by several ironmasters to possess the work. Very little is known of the author (Dud Dudley), but he is generally supposed to have been related to Lord Dudley. Dr. Plot, who quotes largely from the *Metallum Martis*, styles him the '*Worshipful Dud Dudley*,' which would induce the belief that he was of a good family. He himself informs us that he was an undergraduate of Balliol College, Oxon; and that he left early, in order to manage his father's iron works at Pensnett. The reader cannot fail to remark how strongly impressed his mind was with the belief that the men of his age were on the eve of greater and more wonderful discoveries, 'by working of mines and fusion of metals,' which, no doubt, served as an incentive to perseverance in the important object he had in view, in spite of the ceaseless opposition to which he was exposed; a conviction which has been so fully realised in our day."

The pamphlet commences with an address to the king (Charles II.) praying for patronage. Then follows an "Epistle" to "His Majesties Great Council, The High Court of Parliament," in which the author deprecates the "decay of wood and timber," as well from *exportation* as from its large consumption in the iron-works: as a remedy, he proposes that timber should not be permitted to be exported; and that Parliament should "animate, as King James did, and also Prince Henry, the making of iron in England, Scotland, and Wales, with pit-coal, sea-coal, and peats; which, if the author (who had a patent for it) had not been opposed, after he had made much good iron with pit-coal, it had long since, by his 'inventions, been fully perfected.' It is quite evident that this shrewd metallurgist was no free-trader, for one of his recommendations to Parliament was:—

"To stop all the exportation of pit-coal, and sea-coal (paying His Majesties duty) if the coal be in a fit place to make iron therewith; and Fifthly, That the author, or his agents, may have power to preserve many thousand tons of pit-coal, which are annually destroyed, for ever in England, Scotland, and Wales, which are fit to make iron; and the author in his Treatise hath demonstrated it, being moved with pity, seeing his native country decaying, humbly offers but his judgment, and leaves the grave consideration thereof to your learned and more serious consultations and actings, praying that you may animate good things, and new inventions, that may bring into His Sacred Majesty, and all royal subjects, safety, strength, wealth, and honour, by our ships, and men-of-war, fishing, navigation, and merchandizing, unto foreign nations; but more especially, to and from the territories of Great Britain, our North Indies abounding in mines and minerals, that they that are of the honourable corporation of Mines Royal and Batteries, or any others, would lay in a common, or joint stock, fully to set the mines at work; by employing our idle and burdensome superfluous people therein, iron, tin, lead, copper, quicksilver, silver, and gold, besides many other minerals, and precious stones, lapis calaminaris, antimonial, magner, &c.; also many mineral earths and precious stones: Did I call Great Britain our North Indies? give me leave to repeat a passage till further satisfaction, of King Josias of Scotland, a great philosopher, physician, and herbalist, living before Christ, 161 years; at which time, two venerable philosophers and priests passing from Portugal to Athens, their ship and company, and mariners, all perished at Ros, they only saved; after refreshing, and good entertainment, the King desired of them what they understood by their science of the nature of the ground of Scotland; after deliberate advisement, said, There was more riches and profit to be gotten within the veins of the earth of Scotland, than above, for the winning of mines and metals; they know this by the influence of the heavens: This you may see in the Chronicles of Scotland."

Here we have a curious account of ancient navigation—a ship sailing from Portugal to Athens gets shipwrecked on the coast of Scotland. We may, however, reconcile this discrepancy, by taking it for granted that Edinburgh had in those days actually its modern name. But to proceed:—

My Dear Master, our Sacred Martyr, Charles the First of ever Blessed Memory, did animate the author by granting him a patent, Anno 14 of his reign, for the making of iron, and melting, smelting, extracting, refining, and reducing all mines and metals with pit-coal, sea-coal, peat and turf, which was extinct and obstructed by reason of the war; and had not this unnatural and unparalleled war been, his late Sacred Majesty himself had set at work many of his mines, and much good had been produced to Great Britain before this time. At present, the author is in good hope, and tremendously prays, that the mines he set at work in his days by the Honourable Corporation of the Mines Royal, &c. be so fully believed the time to be near, when the Omnipotent God, before he judge the world in fire, will show His Omnipotency unto the nations, by revealing of the wonderful and incredible things of nature, of which the learned do believe very many to be in the







## MINING IN SOUTH AUSTRALIA.

[FROM OUR OWN CORRESPONDENT.]

Adelaide, May 15.—I avail myself of an overland mail to forward to you the report of the Burra Burra Company, which will be read with interest by your subscribers. You will perceive that the prospects are as good as ever: what will your readers say of the size of the lode mentioned in Capt. Roach's report? The large engine has not yet arrived, but the preparations are all ready for transporting it forthwith to the Burra; an immense carriage has been purposely constructed to carry the heavy pieces, but with every precaution, and the appliances of unlimited means, it will be a matter of considerable difficulty to get this large engine safely delivered at the Burra, considering the unformed state of the roads—although you are aware that the road all the way to the Burra is level enough, and does not offer any other obstruction to the transport.

A sudden fall of 80l. per share took place a short time since in Burra shares; they were at 201l. one week, and went down to 170l. in a couple of days—present price 171l. This fall was owing to nothing else but a lot of shares having been forced into the market by a speculator who could not hold, and is in no wise to be looked upon as any criterion of the value of the shares generally: as they are still considered worth 200l., in the face of the next dividend being reduced in amount, which seems pretty generally the impression will be the case.

During the last week or two we have at length been blessed by a heavy fall of rain. The winter season of 1850 (May to October) was so dry, that not alone was the supply of grass much less than usual, but the waterholes on the lines of the heavy traffic dried up. As the summer advanced, and the scanty pasture and supply of water diminished, the transport became more precarious and uncertain every day, till at length, in last month, the carcasses of dead bullocks all along the line of roads to the north, plainly told that, until the rains came, no drays could venture to travel.

The Patent Copper Company, at Kooronga, were forced to extinguish one furnace after another, till, at this present time of writing, the fires are for the moment all out; they could neither get their supply of wood from the scrub, to the eastward, nor the supply of coal from Port Wakefield, to the westward. The Burra Company cannot get either the copper or the ore which they have on hand at the mine down to the coast, and the directors, therefore, intimate, in their last report, the probability that exists of a reduced dividend next quarter: but, fortunately, the drought is now at an end—the fall of rain has been very heavy, and coming as it does at this early period of the autumn, the warm sunny days which have intervened between the rainy days have produced such a change in the aspect of the country as can only be witnessed in an Australian clime. The parched dried up appearance of the country has given way to an emerald green colour; and in two or three weeks more there will be abundance of grass, and things will go on as usual.

If one considers for a moment how peculiarly liable traffic in South Australia is to become interrupted—on the one hand by excessive dryness, and on the other by the flooded state of the country, when it once begins to rain in earnest, too much stress cannot possibly be laid on the importance of establishing tram and railroads as soon as possible. No other country in the world is so favourably formed for such undertakings as this; and any doubt that may exist as to such speculations being remunerative can easily be removed, by granting the companies who would undertake to construct rail and tramroads a certain proportion of land along their lines: this could be carried out now, as much of the land is still unsold, with the certainty of being able to bring produce to the shipping port at a trifling cost and great expedition—the land along both sides of the lines would be one vast cornfield. A railroad from Adelaide to the Burra would open up, not alone a large extent of excellent agricultural land, but also the principal mining districts; and we would then be in a position not to fear either drought or flood.

It is to be hoped that the new Representative Council will take the initiative in these matters, and pass a measure on a sufficiently liberal scale to encourage English capitalists to provide for our necessities in this respect. You may depend upon it, the force of my observations will be substantially borne out by the despatches which must be on their way to England now from the Patent Copper Company. The large capital which this company has already invested here will not have fair play, unless some means are adopted to ensure them a constant supply of fuel. Taking the distance from Port Wakefield to their works at Kooronga to be 60 miles, of a country well adapted for tramroads, it certainly does not appear probable that this wealthy company, after investing 150,000l. and more, will hesitate to invest another 50,000l. or 60,000l., in order to place their first investment on a safe footing. The Patent Copper Company will, of course, advocate the line to Port Wakefield, west of the Burra; but there can be no doubt that, to the colony at large, a proper and well constructed line of railroad from Port Adelaide, through the centre of the colony to the Burra, will be of greater benefit than a mere tramroad to Port Wakefield.

A couple of years more will witness a complete line of steam communication with England; many people will then make the voyage who now do not give it a thought—men of influence and intelligence will be able to visit Australia with ease, and judge for themselves; and I do not apprehend I am too sanguine in saying that the next 10 years will see that important work, the Burra railroad, carried into effect.

The *George Home*, a barque of about 350 or 400 tons, foundered a fortnight ago, with 500 tons of Burra ore on board, shipped at Port Wakefield by the Patent Copper Company: she brought a cargo of coals from Newcastle (New South Wales) for the smelting works, which was discharged at Port Wakefield, and I believe a survey was held on her prior to taking in the ore. She sailed a fortnight ago, and had not got more than 800 miles from Kangaroo Island before she literally went to pieces—all her timbers starting, and, as the mate described it, "being only held together by the sheathing." The crew and one or two passengers who were on board were all saved in the boats, although they suffered considerable hardship before they reached Adelaide. She was an old gunboat, built in 1804; and the only wonder is, how any captain could be found rash enough to take the command of such an old tub.

There has been a new discovery of mineral land—a boulder of copper ore, 20 feet long, 10 feet broad, and from 6 to 8 feet out of the ground, about 60 miles north-east from Adelaide, close to the Murray Scrub; it is to be surveyed shortly, when I, of course, with many others, will visit the place and judge for myself, and will then inform you what it is likely to turn out. Report speaks highly of it; in fact, the boulder which was the origin of the Burra Mine was not larger than this. You can fancy there are plenty of us anxious for a slice of it.

[To be concluded in next week's Journal.]

## GREAT WESTERN AND FOREST OF DEAN COAL COMPANY.

Capital £25,000, in 25,000 shares of £1 per share—paid-up.

PROVISIONALLY REGISTERED.

TEMPORARY OFFICE, NO. 3, BRIDGE-STREET, WESTMINSTER.

DIRECTORS.

Colonel SALWEY, M.P., Egham Park, Surrey.  
JAMES HARMER, Esq., Ingress Park, Greenhithe, Kent.  
Prospectuses may be obtained of, and application for the remaining shares to be addressed to, the Secretary, at the offices of the Company; or to the Solicitors to the Company, Messrs. Coombe and Nicoll; Messrs. Lind and Rickard, stockbrokers, No. 3, Bank Chambers, Lombard Street; and of the following agents:—Henry Davill, Esq., solicitor, Windsor; Messrs. Lowe and Sons, stockbrokers, Liverpool; Geo. P. Wilkes, Esq., solicitor, Gloucester; Henry Davill, Esq., stock and sharebroker, 6, Clare Street, Bristol; J. B. Willocks, Esq., Barbican, Plymouth.  
By order of the Directors,  
HENRY CAPPER, Secretary.

Sept. 26, 1851.

**EAST LANCASHIRE RAILWAY.**—The Directors are prepared to RECEIVE TENDERS FOR FOUR HUNDRED AND FORTY TONS OF IRON RAILS, AND FIVE HUNDRED TONS OF BARLOW'S CAST-IRON SLEEPERS, together with the necessary fastenings.

Specifications and drawings may be seen at the Engineer's Office, Bury Station.  
Tenders to be sent in to the Secretary before Friday, the 31st inst.  
By order, JAMES SMITH, Sec.

Bury, Oct. 14, 1851.

**TOURNAY TO JURBISSE, AND LANDEN TO HASSELT RAILWAY COMPANY.**—The Board of Management hereby inform the shareholders in the above Company: that at the Fifth Half-yearly General Meeting, held at the offices of the Company, at Brussels, on Monday, the 13th inst., the balance-sheet, as presented by the Board, was only SHILLINGS, and the DIVIDEND, for the first six months of the year 1851, fixed at FIVE SHILLINGS and TWOPENCE per share. The same will be PAYABLE on and after the 1st of November next, on presentation of the shares, at the offices of the Company, 67 A, Upper Thames-street, London, and 4, Rue de Bodem, Brussels, between the hours of Ten and Twelve A.M.

By order, GEORGE WOODS, Secretary.  
67 A, Upper Thames-street, London, October 16, 1851.

**RAILWAYS.**—With an abundant harvest, cotton, and colonial produce at one-half the prices of last year, and railway calls, comparatively speaking, all paid up, it follows that the already large surplus capital now waiting employment must necessarily increase. The exchanges are everywhere becoming more favourable for this country. The California and Australian gold discoveries will also add to the abundance of money. Hence the causes of an approaching improvement in the value of public securities. Capitalists who seek profitable investments, unattended with risk, should act only upon the soundest information. Price seldom indicates the true value of railway property. Hence many shares are frequently as much above as others are below their real value—the market price of the day being ruled more by the present supply and demand, and the operations of speculators, than by any reference to the intrinsic merits of the property. The bond of ultimate value of a railway depends upon its costs, traffic, and expenditures; the probabilities of competition or alliance with neighbouring companies, the requirements for additional capital, and other causes wholly irrespective of the merely speculative feeling of the day. Calculations, founded upon these considerations, show what shares at the current market price may be bought, sold, or exchanged with advantage. But the selection of that stock which is the most eligible requires data that can only be arrived at by those who give an undivided attention to the subject.

Every information afforded to capitalists wishing to invest or to exchange their securities, and to purchase or purchase effected upon the best terms. The subscribers, believing it to be incompatible with their duties as agents to speculate on their own account, are exclusively to a legitimate commission business. JAMES S. TRIPP & CO., Lombard-street Chambers, 33, Clement's-lane, City.—Established 1839.

## CHYPREASE CONSOLS TIN AND COPPER MINE.

ST. ENODER, CORNWALL.

In 1824 shares, of £5 5s. per share.—Deposit £1 7s. 6d.

Applications for the remaining shares to be made to Mr. Thomas Lewis, No. 17, New Meeting-street, Birmingham, Partner to the Company, of whom every information can be obtained.

## CWM DYLE ROCK AND GREEN LAKE COPPER MINING COMPANY.

CONDUCTED ON THE COST-BOOK PRINCIPLE.

SHAREHOLDERS NOT LIABLE BEYOND THE AMOUNT OF THEIR SHARES.

Capital £30,000, in 10,000 shares, of £3 each.  
6000 paid-up shares, carrying interest of 6 per cent. upon £2 per share, the remaining £1 to take the dividends from the working of the mine.

4000 deposit of £1 paid, and no further call likely to be made.

The above shares have all been subscribed for, and the mine will be in full activity, by being worked upon an extensive scale, so as to show the smelting and refining houses erected, which will be commenced immediately.

The Committee of Management have been engaged in testing the value of the minerals produced from the mine, and have the satisfaction in being able to state, that the result has been perfectly satisfactory, as they find that the minerals not only produce from 15 to 30 per cent. from their inferior samples, and from those of a superior quality 30 to 60, of not only fine copper, but a small per centage of gold and silver.

Offices, 2, Scott's-yard, Bush-lane, Cannon-street, City.

## WHEEL TREWANE (SILVER-LEAD),—

SAINT KEW, CORNWALL.

CONDUCTED ON THE COST-BOOK PRINCIPLE.

In 8448 shares, of £1 5s. per share.

COMMITTEE OF MANAGEMENT.  
PIERCE SOMERSET BUTLER, Esq., M.P.  
Sir CHARLES KIRKPATRICK, Bart.  
RICHARD WOODTHORPE, Esq., R.N.  
WILLIAM DUNBAR, Esq.  
JAMES HAYNES, Esq.

BANKERS—Messrs. Masterman, Peters, & Co.  
PUNAS—Mr. A. Elborough.

OFFICES—No. 12, OLD JEWRY CHAMBERS.  
A limited number only of the shares will be disposed of; no allotments will be made, but transfers will be executed to unexceptionable parties, and certificates given on payment for the shares, application for which may be made to Mr. A. Elborough, at the offices of the company, 12, Old Jewry Chambers, City; Messrs. Ratten and Wood, stock and sharebrokers, No. 1, Crown-court, Threadneedle-street; James Lane, Esq., mining broker, 52, Threadneedle-street; or Isaac Fletcher, Esq., stockbroker, Liverpool, where prospectuses and reports on the mine may be obtained, and specimens of the ores seen.

## WEST WHEEL GRENVILLE COPPER AND TIN MINE,

CROWAN, CAMBORNE, CORNWALL.

Held under a lease from the Rev. Hender Mollsworth St. Aubyn, for 21 years, from the 31st March, 1851, at 1-9th duty.

NOW BEING WORKED ON THE COST-BOOK SYSTEM.  
In 6000 shares.

A moiety will be carried by the present proprietors.—A call has been made on the whole of the shares, the amount of which will cover the cost of engine, machinery, and all erections necessary for fully working the mine: 3000 shares only will, therefore, be disposed of to unexceptionable parties at £1 per share, inclusive of the call.

COMMITTEE.  
HENRY BENNETT, Esq., 9, Spring-gardens.  
JAMES SYDNEY CROCKER, Esq., Norfolk-road, St. John's Wood.  
PHILIP JOHNSON, Esq., Fitzroy Lodge, Kentish Town.  
GEORGE LEDWELL TAYLOR, Esq., Hyde-park-square.  
THOMAS HARVEY, Esq., Great St. Helen's.

BANKERS—Messrs. Barnett, Hoares, and Co.  
MANAGING AGENT—Capt. Joseph Vivian, North Rowcar.

OFFICES.—29, GREAT ST. HELEN'S, LONDON.

The importance of this mineral property is so obvious, that little need be said of it beyond the statements contained in the annexed reports.

The set is very extensive, being upwards of 600 fathoms in breadth, and the same in length. The lodes of copper and tin are six or eight in number at least, only one of which has been worked on, and are the lodes of the celebrated West Wheel Basset, West Wheel Basset, South Wheel Frances, and some of those of North Wheel Basset—South Wheel Grenville being immediately west of this remarkable cluster of the richest mines in the world.

The geological position of the mine is most favourable, at the junction of the granite with the killas. The ores raised from this mine are the black and grey copper, and are the richest kinds of ores found in the country; and the tin is the best grain tin—specimens of each may be seen at the offices.

The shafts are in good condition—one of them requires to be sunk 4 fathoms only, to allow the run of ore in the 42 fathom level to be raised and returned.

The surface buildings, also, n-house, smith's shop, &c., are in good repair.

A new 40-inch cylinder steam-engine is now being put up, and all necessary machinery for forcing the water, which will be accomplished within two months—soon after which returns from the ores may be relied on.

The following reports from the agents of the several important mines under their management, in the immediate neighbourhood, afford the surest guarantee of the value and importance of this mine; and no reasonable doubt can be entertained of results as successful as those which have uniformly attended the working these lodes in the mines already mentioned.

The plan of the mine and section of the workings (which may be seen at the office) will furnish a correct idea of its extent, situation, and capabilities.

Applications for shares and prospectuses may be made to Foster Brothers, the Stock Exchange, and 27, Tokenhouse-yard, at whose offices specimens of the ores may be seen. London, October 24, 1851.

## REPORTS.

**Camborne, Jan. 1.**—In reply to your communication relative to West Wheel Grenville, situated in Crowan, and adjoining the parish of Camborne, I was employed there as the underground agent, and remained in that capacity until the mine ceased working. The reason of her being suspended I never knew; and when I had an order to commence drawing up the materials, I requested the sumpmen, who were then engaged in sinking the engine-shaft below the 42 fathom level, to stop some of the ore ground in the bottom of the 42 fathom level, and in three or four days I had prepared for that purpose, they broke about £30 worth of ore. I strongly urged the representative of the company (who acted for, I believe, distant shareholders) to complete the shaft to the 52 fathom level, as I was of opinion that the next level would be a good one, but my entreaties were of no avail. The fact of the ore ground having lengthened from the 22 to the 42 fathom level, from a few feet to 7 fathoms, and at the same time dipping towards the killas, ought to be of itself a sufficient inducement to have had another level under the ore ground, and having only 4 fathoms to sink to enable us to do so. The lode in the 42 fathom level is about 1½ ft. wide, composed principally of grey and black ore, and a portion of maldic, and will turn out 3 tons per fathom worth about £8 per ton—the underlay of the lode is about 4 inches in a fathom. I have no hesitation in stating that I know of no spot in our neighbourhood which is likely to give an earlier chance of success to the adventurers than this speculation; and have oftentimes said it to be my opinion that in the killas a good lode would be found. Since the last working the lode has been opened upon the back in the killas, some few fathoms to the east of the shaft, in which can be seen a fine strong lode, about 3 feet wide; this goes further to confirm my opinion as to the probability of success. I have had some 60 years' experience in mining as an underground agent; and I can say, that it is my impression, judging from the locality, its position, and what has already been discovered, that she will make a good mine. The expense of working will be no trifling in comparison with many mines in this neighbourhood, that it makes it the more desirable; a 30-inch engine, with a 6-inch lift, will put her down 100 fms., and enable you to intersect the lodes to the north and south, which amount to some five or six in number, independent of the main lode. Should you require any further information; I shall be glad to communicate with you.

**North Rowcar, Feb. 19.**—For the guidance of any parties by whom Capt. Johnson Vivian may be known, I beg to state that, in my opinion, any report of his relating to mining matters may be strictly relied upon; and that, judging of the locality of West Wheel Grenville, I consider it to be a good speculation.

**Carn Brea Mines, near Redruth, Feb. 20.**—Having this day been on the ground it further strengthens our opinion that your set, formerly called the Grenick Mines, now West Wheel Grenville, situated in Crowan, and adjoining the parish of Camborne, is a set holding out the most promising appearances, being a continuation of the lodes worked on in the best dividend-paying mines in the county—South Basset, South Frances, &c., with those to the west of the above-mentioned set in their nature, but, so far as development, are equally promising, lying and situated on the junction of the killas and granite, with two or more strong courses of elvan running through the entire length of the set, having so much already done with regard to surface erections, having an account house, smith's shop, and other necessary erections, two engine-shafts, well secured with stone, two bob pits, and stands complete. The capital required being so comparatively small, to put the mine in a full and efficient state of working, we can with confidence recommend it to any party, as holding out prospects of no ordinary nature, believing, if worked with spirit and economy, that it will shortly be on the list of the best paying mines in the county.

**South Wheel Frances, March 13.**—In conformity with your request we have this day inspected West Wheel Grenville, and beg to hand you our views thereon. The geological features of the set are good, being situated on the junction of the granite and killas, with cross-courses and elvan courses running through it. From the section of the old workings, and what we can see, we consider the set a good one, and well worthy the attention of mining adventurers.

WILLIAM FASCOE, JAMES POPE,  
Agents at South Wheel Frances, and South Wheel Basset.

**Loewes Mines, March 17.**—Agreeably to your request I have inspected the Grenick set, now called West Wheel Grenville, the situation of which is at the junction of the granite with the spar and killas. A large elvan-couise passes through the set, with several tin and copper lodes crossing the same. This mine is worked on one of these lodes to the 42 fathom level in depth, and the shaft sunk about 4 or 5 fathoms below that level. I have been informed by accredited miners that there is a good lode of ore in the bottom of this level, 8 or 10 fms. long. Several tons of rich ore have been raised since the orders were given to discontinue the workings of the mine. This mine is situated in the same position with the junction of killas and granite as those of those of the richest mines in Camborne. This mine, if worked with spirit and under good management, in my opinion, will be found a good and permanent speculation.—MARK REED, agent of Loewes Mines.

**The Report of Labourers Employed at West Wheel Grenville during the late Working.**

**West Wheel Grenville, Jan. 26.**—We, the undersigned men, employed as stampan in the mine, and when Capt. Johnson Vivian, the agent, had notice from the purser to stop working, and to draw up the materials without any delay, he requested us to come up in the 42 fathom level to break some ore, in which we worked three days, and broke in that time about seven tons, which was sold for about £50; but in breaking the same, the best part of the ore was washed away with the water, the principal part being black ore; and from the mine to Barriepore, a distance of about 1½ mls, the water was as black as possible; the bunch in the bottom of the 42 was found to be 10 fathoms in length. You will find the shaft in a good state of repair, with the back casing all in from the 20 to the 42, and likewise the ladders from the 30 to the 42, together with the windrope doorpiece and workings, all of which were new when put in.

WILLIAM JEWELL, JOHN JEWELL, WILLIAM NOBLE.

## BUSPARVO TIN AND COPPER MINE,

NEAR CAMBORNE, CORNWALL.—In 7500 shares of £1 each, paid up.

This MINE has been working on a limited scale for some time, the operations being confined to the adit level, which has been driven 150 fathoms on the Lambdo lode, and the copper ore produced, at only 12 fathoms depth, is as rich, that it realised £10 10s. per ton in August last. It is now proposed to raise the above capital, to extend the workings, erect engines, and bring the mine into an efficient state.

Application for the remaining shares to be made to the Committee of Management, at the office, 26, Austinfriars, where prospectuses may be obtained.

## GREAT BRYN CONSOLS COPPER AND TIN MINING COMPANY.

At a GENERAL MEETING of shareholders, held at Anderson's Hotel, Fleet-street, on Friday, the 17th instant.

WILLIAM GARNETT, Esq., in the chair.  
The notice convening the meeting having been read by Mr. Lelown, together with the report of the committee of management; it was

Resolved.—That the report now read be received and adopted.—Carried unanimously.

It was then moved by Mr. Wood, seconded by Mr. Lynch, and carried unanimously.—That the Committee of Management have entitled themselves to the confidence and thanks of the shareholders for the promptitude and frankness with which they have laid before them a statement of the position and prospects of the Company, and that the gentlemen be requested to continue their services.

Moved by Mr. Wood, and seconded by Mr. Molyneux.—That the cordial thanks of the meeting be due, and hereby given, to the Chairman, for the kindness and courtesy evinced by him in conducting the business of the day.—Carried by acclamation.

## AUSTRALIAN GOLD MINING COMPANY.

REGISTERED PROVISIONALLY.—Capital £10,000, in £1 shares.

At a MEETING of the Provisional Committee, held this day, it was resolved, —

1. That the shares of this Company be merged into the greater company, to be announced in a few days, with a capital of £100,000, in 10,000 shares, of £10 each.—Deposited 14, per share.

2. That the money already received from the present scrip-holders be allowed in the deposit on shares of the greater company.

CHARLES GURNEY, Sec. pro tem.  
Offices, 14, Great Winchester-street, City, October 24, 1851.

## GOVERNMENT SCHOOL OF MINES,

AND OF SCIENCE APPLIED TO THE ARTS.

Museum of Practical Geology.

The COURSE OF STUDY at this INSTITUTION will commence on THURSDAY, the 6th of November, 1851, and the following LECTURES and PRACTICAL DEMONSTRATIONS will be given during the session:—

1. CHEMISTRY, applied to Geology and the Arts. ... EDWARD FORBES, F.R.S.  
2. NATURAL HISTORY. ... LIONEL PLATT, F.R.S.  
3. MECHANICAL SCIENCE, with its applications. ... ROBT. HUNT, Keeper of Mining Records.  
4. METALLURGY, with its special applications. ... JOHN PERCY, M.D., F.R.S.  
5. GEOLOGY, and its practical applications. ... A. C. RAMSAY, F.R.S.  
6. MINING and MINERALOGY. ... WASHINGTON W. SMYTH, M.A.

The fee for the course of two years is one payment of £40; or £20 for each session, from November to August inclusive.

Practical Instruction in the Field, in Geology, Mining, and Palaeontology, is included in the above charges.

Occasional Students may attend separate Courses of Lectures and Field Instruction on payment of the Fees mentioned in the program.

The Laboratories for Chemistry and Metallurgy will be open for the reception of Pupils on payment of £15 for the session of five months.

Officers of the Army and Navy, either in the Queen's or the Honourable East India Company's service, are admitted to the Lectures at half the usual charges.

Students who propose to enter with the view of obtaining the Diploma of the Institution, are requested to apply to Mr. T. Graham, at the Museum, from whom the necessary information may be obtained.

H. T. DE LA BECHE, Director.

## LIVERPOOL COLLEGE OF CHEMISTRY.

Professor—Dr. SHERIDAN MURPHY, F.R.S.E.

STUDENTS ARE INSTRUCTED IN EVERY BRANCH OF THE SCIENCE.  
Fees for Analysis or Assays may be had on application, with full prospectuses.

## STEAM TO INDIA, CHINA, &amp;c.—Particulars of the regular

MONTHLY MAIL STEAM CONVEYANCE,  
AND OF THE ADDITIONAL LINES OF COMMUNICATION, NOW ESTABLISHED BY THE

PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY

with the EAST, &c. &c. The Company book PASSENGERS, and receive GOODS and PARCELS, as heretofore, for CEYLON, MADRAS, CALCUTTA, PENANG, SINGAPORE, and HONG KONG, by their steamers, starting from SOUTHAMPTON on the 20th of every month, and from SUEZ on or about the 10th of the month.

One of the Company's first-class steamers will also be dispatched from Southampton for Alexandria, as an extra ship, on the 3d of November next, in combination with extra steamers, to leave Calcutta on or about the 20th of October. Passengers may be booked, and goods and parcels forwarded by extra steamers to or from SOUTHAMPTON, ALEXANDRIA, ADEN, CEYLON, MADRAS, and CALCUTTA.

**BOMBAY.**—The Company will likewise dispatch from Bombay, about the 1st November next, and every alternate month thereafter, a first-class steam-ship for ADEN, to meet there the Company's ships between Calcutta and Suez; and at Alexandria one of the Company's steam-ships will receive the passengers, parcels, and goods, and convey them to Southampton, calling at Malta and Gibraltar.

But PASSENGERS, PARCELS, and GOODS for BOMBAY and WESTERN INDIA will be CONVEYED THROUGHOUT from SOUTHAMPTON in the Mail steamers, leaving Southampton on the 20th of October, and the corresponding vessels from Suez to Aden, at which latter port a steam-ship of the Company will be in waiting to embark and convey them to Bombay.

Passengers for Bombay can also proceed by this Company's steamers of the 9th of the month to Malta, thence to Alexandria, by Her Majesty's steamers, and from Suez by the Honourable East India Company's steamers.

**MEDITERRANEAN.**—MALTA: On the 20th and 29th of every month.—CONSTANTINOPLE: On the 29th of the month.—ALEXANDRIA: On the 25th of the month.

**SPAIN AND PORTUGAL.**—Vigo, Oporto, Lisbon, Cadiz, and Gibraltar, on the 7th, 17th, and 27th of the month.

**N.B.**—Steam-ships of the Company now ply direct between Calcutta, Penang, Singapore, and Hong Kong, and between Hong Kong and Shanghai.

For further information and particulars of the Company's recently revised and reduced rates of passage-money and freight, and for plans of the vessels, and to secure passages, &c., apply at the company's offices, No. 122, London-lane, London; and Oriental-place, Southampton.

TO MINE PROPRIETORS, WATER-WORK AND LAND-DRAINAGE COMPANIES, CONTRACTORS, MANUFACTURERS, AND OTHERS.

## GREAT BRITAIN STEAM-SHIP.

THE PROPRIETORS of this SHIP desire TENDERS for the WHOLE (or for any definite section) that would not prejudice the entirety of the remainder) of her STEAM MACHINERY, as originally constructed, consisting of FOUR 36-inch CYLINDERS, of 6-feet stroke, with pistons and rods, air-pumps and condensers, connecting-rods and guides, and all the detail of nozzle and valve gearing, necessary to render each pair of cylinders complete in themselves, from the pistons to the crank-pins.

Apply to Mr. Croome, civil engineer, or Capt. Mathews, on board the vessel, Sandon Graving Dock; or Gibbs, Bright, & Co., Liverpool.

## THE PATENT WATER-BALLAST STOWAGE BAGS

AND PUMPS HAVING BEEN TESTED, and met the approval of practical men, the Public is respectfully informed that all are now prepared for FITTING UP SHIPS, by application to Mr. KIRK, at the Works, GIBSON'S BUILDINGS, NEWCASTLE-UPON-TYNE, where a pamphlet and illustrations may be obtained, or forwarded to parties, and where all inquiries will be fully replied to.—Newcastle-upon-Tyne, Aug. 18, 1851.

AGENTS.  
Messrs. JOHNSON, 166, Buchanan-street, Glasgow.

Applications for licenses and other information to be addressed to the undersigned ALFRED BARRETT, Bishopsgate Foundry, Skinner-street.

## FOR THE SHOOTING SEASON, 1851.—

DEANE, ADAMS, & DEANE, GUN-MAKERS to H.R.H. PRINCE ALBERT, beg respectfully to call the attention of SPORTSMEN to their late IMPROVEMENTS in GUNS, PISTOLS, and RIFLES, which may be seen and tested daily, with a large assortment of their best town-made GUNS, at the MANUFACTORY, No. 30, KING WILLIAM-STREET, LONDON-BRIDGE.—August 7, 1851.

\* Sporting ammunition of the best quality on the lowest terms.



## THE MINING SHARE LIST.

Shares.	Mines.	Paid.	Dividends per Share Declared.	Last Paid.	Last Price.	Present Price.
5120	Alfred Consols (copper), Phillack	3	£ 1 19 to 1st Oct.	£0 6 0 Oct.	13	13 1/2 14
1248	Alt-y-Crib (silver-lead), Talybont, Wales	—	0 7 6 to Oct.	0 8 0	7 7 1/2	7 1/2
1624	Balldown (tin), St. Just	11 1/2	8 15 to Aug.	0 4 to Aug.	10	10
4000	Bedford United (copper), Tavistock Devon	2 1/2	3 16 to Aug.	0 4 to Aug.	7 1/2	7 1/2
64	Boscawell Downs (tin), St. Just	—	750 0 to May, 1849	0 5 to May	200	200
100	Brynall (tin and copper), St. Just	18 1/2	440 0 to 4th April	0 5 to 4th April	15 1/2	14
1000	Bryntall, Llanidloes, Montgomeryshire	3 1/2	0 5 to Sept. 1847	0 5 to Sept.	6 1/2	5
1000	Callington (lead and copper), Callington, Devon	2 1/2	0 5 to Oct., 1851	0 5 to Oct.	5 1/2	5
4000	Calstock United (copper)	2 1/2	206 0 to Sept. 1851	2 0 to Sept.	95	105 105
1000	Carn Brea (copper and tin), Illogan	15	—	—	105	105
128	Comford (copper), Gwennap, Cornwall	70	—	—	110	110
356	Condurow (copper and tin), Camborne, Cornwall	20	—	—	110	110
198	Cwmystwith (lead), Cardiganshire	60	—	—	110	110
1024	Davon Great Consols (copper), Tavistock	1	244 10 to Sept.	5 0 to Sept.	280	286 282 75
180	Dolcoath (copper and tin), Camborne	25 1/2	255 10 to 1847	—	135	135
128	East Pool (tin and copper), Pool, Illogan, Cornwall	24 1/2	243 0 to 1843	—	150	150
94	East Wheal Crofts (copper), Illogan, Cornwall	125	242 10 to 1843	—	150	150
128	East Wheal Rose (silver-lead), Newlyn	80	2237 10 to 5th Sept.	13 10 to Sept.	450	450
494	Fowey Consols (copper), Tywardreath	40	—	—	30	30
3750	General Mining Company for Ireland (copper)	1 1/2	35 per cent. to June	10 per cent. 1/2 year	5 1/2	5 1/2
100	Goginan (lead), Cardiganshire, Wales	5	440 0 to —	—	200	180
96	Great Consols (copper), Gwennap, Cornwall	1000	353 6 8 to January	—	300	300
10000	Great Polgoth (tin), St. Austell	3	0 2 to Sept.	0 2 to Sept.	3	3
119	Great Work (tin), Gernoe	100	115 0 to Aug.	5 0 to Aug.	200	200
1024	Haroldfoot (lead), near Liskeard, Cornwall	25 1/2	25 0 to Feb. 1844	Feb. 1844	12	12 1/2
1000	Helmbush (lead and copper), Callington	24 1/2	0 5 to Sept.	0 5 to Sept.	4 1/2	4 1/2
796	Kirkcudbrightshire (lead), Kirkcudbright	9 1/2	3 0 to 1st Aug.	0 10 to Aug.	18	18
1000	Lewis (tin and copper), St. Erth	17	1032 0 to 5th Sept.	2 0 to Sept.	150	150
160	Levant (copper and tin), St. Just	20	640 0 to 1st Aug.	20 0 to Aug. 1	700	700
100	Liburne (lead), Cardiganshire, Wales	75	1 0 6 to July	0 4 6 to July	10	10
8000	Low's Patent Copper Smelting Company	9	7 10 6 to Feb., 1847	7 p. ct. p. annum	8 1/2	8 1/2
9000	Mining Company of Ireland (copper, lead, and coal)	7	217 10 to 1st Sept.	7 10 to Sept.	202 2 1/2	202 2 1/2
300	North Pool (copper and tin), Pool	22 1/2	256 0 to —	6 0 to Sept.	124	124
140	North Roskear (copper), Camborne	10	374 0 to 5th April	—	650	650
6000	North Wheal Basset (copper and tin)	55 1/2	1 15 to June	0 10 to 4th June	40	40
128	Par Consols (copper), St. Blazey	21 1/2	10 0 to March 5	5 0 to March	340	340
1160	Perran St. George (copper and tin)	21 1/2	18 4 6 to Aug.	0 15 to Aug.	25	25
200	Phoenix (copper and tin), Linkinghorne	30	255 0 to July	2 10 to July	125	125 120
560	Providence Mines (tin) Uny Lelant	20 1/2	27 0 to 5th Aug.	3 0 to Aug.	150	150 150
256	South Caradon (copper), St. Cleer	20 1/2	101 15 to Sept.	6 0 to Sept.	200	200
256	South Tolgus (copper), Redruth, Cornwall	16	3 10 0 to Sept.	0 2 6 to Sept.	10 1/2	10 1/2
248	South Wheal Frances (copper), Illogan	80	559 0 to Aug.	4 0 to Aug.	100	100
1024	Sparrow Consols (tin), St. Just, Cornwall	1 1/2	2 11 to July, 1849	—	3 1/2	3 1/2
94	St. Ives Consols (tin), St. Ives	80	5 17 6 to Sept.	—	7	6 1/2
1000	Stray Park and Camborne Veins (copper), Cornwall	15	27 15 to Sept.	0 0 to Sept.	15 1/2	15 1/2
9600	Tamar Consols (silver-lead), Beeralston	4	1 3 to Oct., 1847	1 0 to Oct. 1847	3 1/2	3 1/2
6000	Tinctor (copper and tin), near Pool	7	1680 15 to 1845	—	200	200
256	Treleign Consols (copper), Redruth	6	402 10 to 5th April	—	15	15
96	Tresavan (copper), Gwennap, Cornwall	20 1/2	246 5 to Oct.	6 10 to Oct.	210	210
120	Trethellan (copper), Gwennap, Cornwall	5	2 10 to Sept.	2 10 to Sept.	35	35
120	Trevelake and Barter (copper)	130	2 2 6 to —	2 10 to Sept.	102 1/2	102 1/2
200	United Mines (copper), Gwennap	80	162 15 to Sept.	2 10 to Sept.	100	97 1/2 105
1024	Wellington (copper and tin), Perranuthnoe	6 1/2	245 0 to 3d Aug.	10 0 to 3d Aug.	355	280
256	West Caradon (copper), Cornwall	10	5 0 to —	—	7	7
512	West Fowey Consols (copper), St. Blazey	10 1/2	109 0 to 1st Oct.	12 10 to Oct.	550	550
256	Wheal Basset (copper), Illogan	2	2331 10 to Aug.	6 0 to Aug.	130	130
256	Wheal Brewer (copper), Gwennap, Cornwall	2	1 0 to July	0 5 to July	30	30
256	Wheal Buller (copper), Redruth	5	8 0 to 8th Sept.	2 0 to Sept.	150	150
124	Wh. Castle and Bosweden (tin and copper)	5	187 0 to Aug.	3 0 to Aug.	57	57 56 1/2
126	Wheal Friendship (copper) Devon	120	21 5 to 21st Aug.	3 0 to Aug.	280	280
8000	Wheal Golden Consols (silver-lead), Perranabuloe	3	27 10 to August	3 10 to Aug.	80	85 89 1/2
430	Wheal Loe (tin), Helston	—	194 10 to 5th Aug.	4 0 to Aug.	200	200
112	Wheal Margaret (tin), Uny Lelant	70	26 10 to —	2 0 to May	40	40 300
512	Wheal Mary Ann (lead), Menheniot	200	6 0 to Aug.	0 10 to Aug.	25 1/2	26
40	Wheal Owles, St. Just, Cornwall	200	—	—	—	—
240	Wheal Heath (tin), Uny Lelant	20 1/2	—	—	—	—
198	Wheal Seton (tin and copper), Camborne, Cornwall	107	—	—	—	—
520	Wheal Trelawny (silver-lead), Liskeard, Cornwall	3 1/2	—	—	—	—
1024	Wheal Treamyne (tin and cop.), Gwennap, Cornwall	9 1/2	—	—	—	—
8000	Wicklow (copper), Wicklow	5	313 per cent.	18 p. ct. end Aug.	28 1/2	28 1/2

## FOREIGN MINES.

Alcan Mining Company (copper), Norway					Brazilian Imperial (gold), Brazil					Cobre Copper Company (copper), Cuba					Copago Mining Company (copper), Chile					General Mining Association (iron & coal), Nova Scotia					Mariano (gold), Colombia					Mexican Company (silver), Mexico					Royal Santiago (copper), Brazil					St. John del Rey (gold), Brazil					United Mexican (silver), Mexico				
14 1/2					24 1/2					40					14					20					2 1/2					59 1/2					10					15					28 1/2				
3 0					17 6					45 12					3 13					6 10					2 0					0 8					33 4					12 17					1 12				
to Mar., 1844					to Dec., 1844					to June , 1850					to Oct., 1850					to June, 1851					to June, 1851					to July, 1846					to Dec., 1846					to Dec., 1850					to Feb. 1850				
2 1/2					34 1/2					38					54 5					12					7					4 1/2					2 1/2					2 1/2					2 1/2				
33 1/2					5 1/2					33 1/2					3 1/2					3 1/2					3 1/2					3 1/2					3 1/2					3 1/2					3 1/2				
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